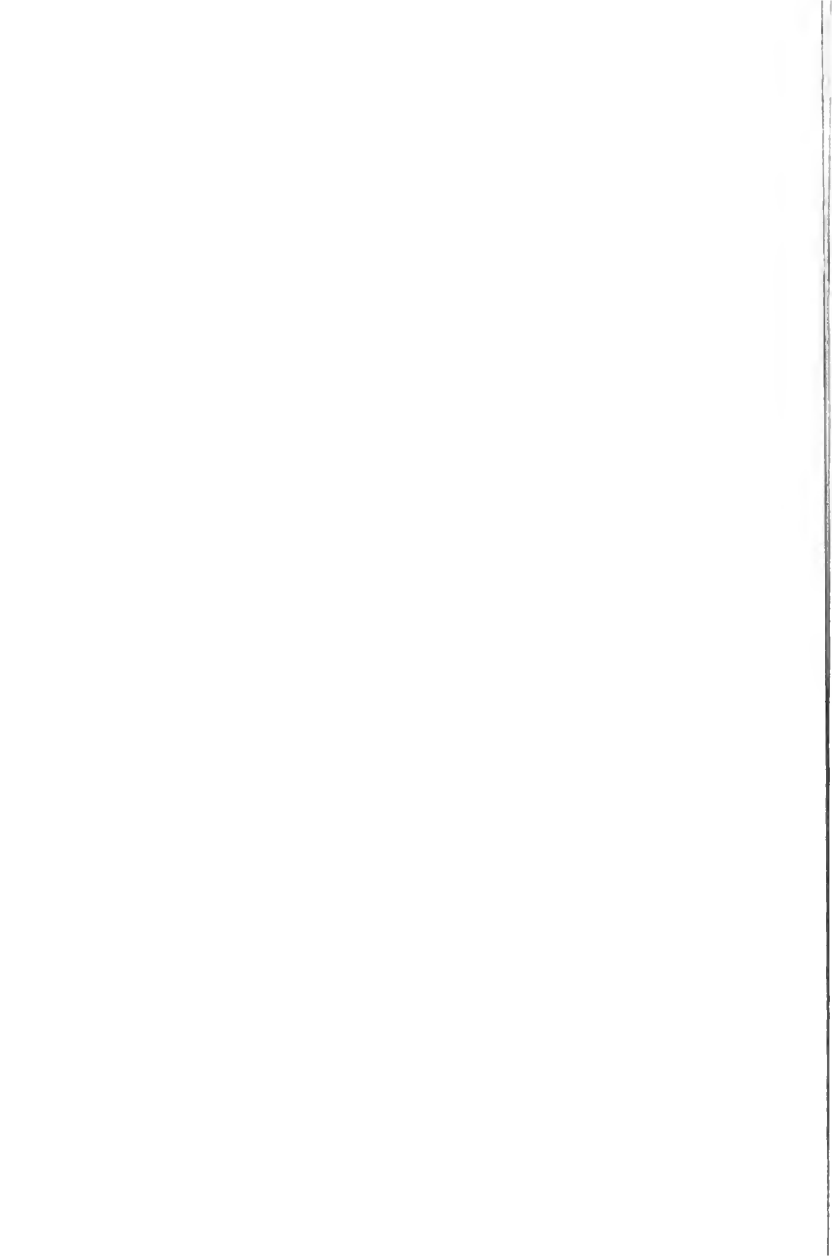


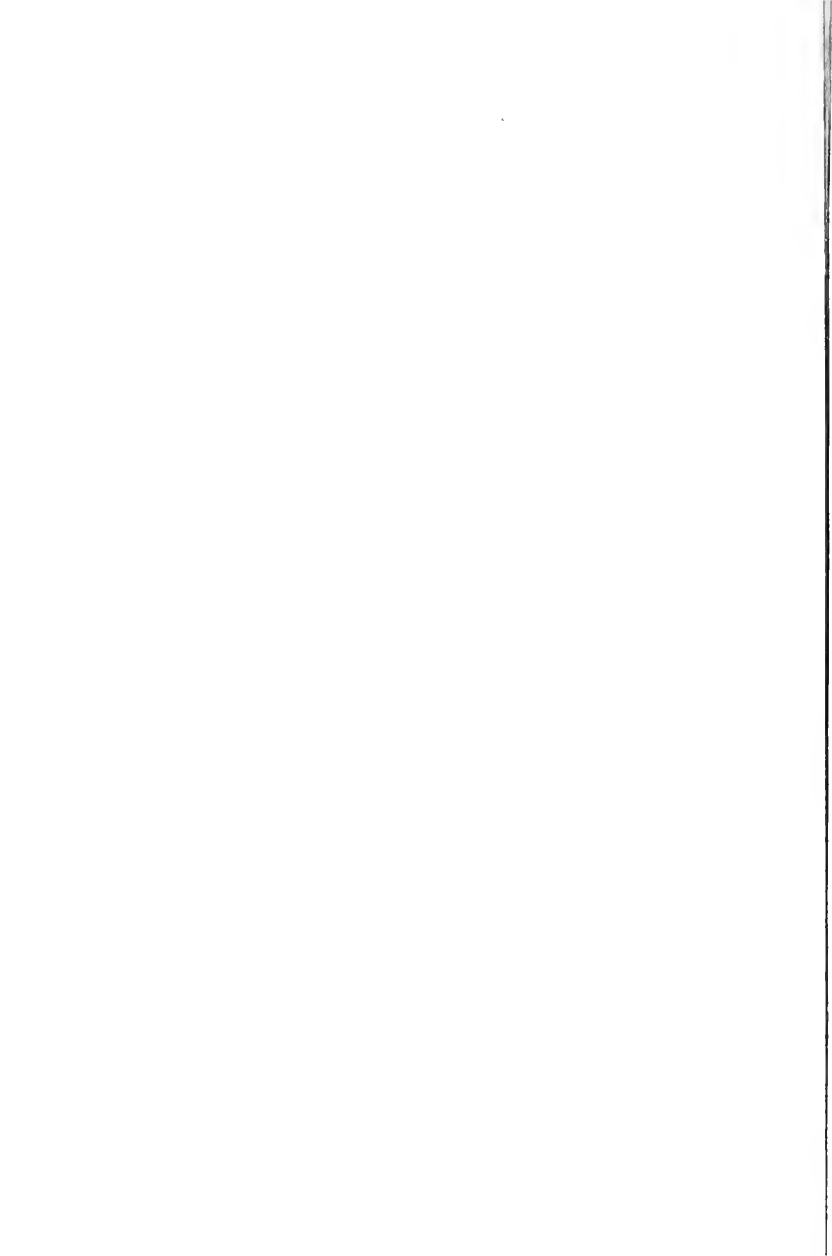


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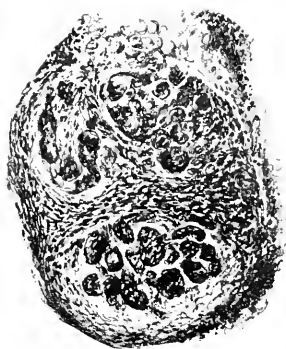




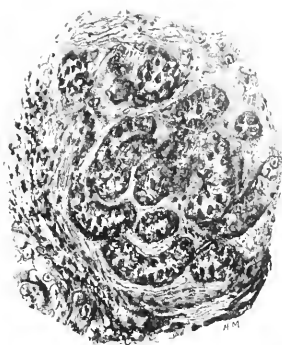


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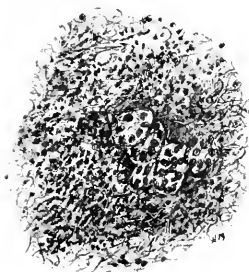




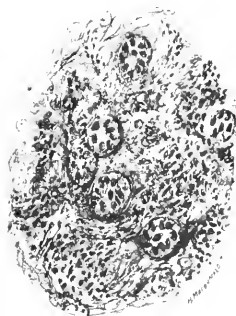
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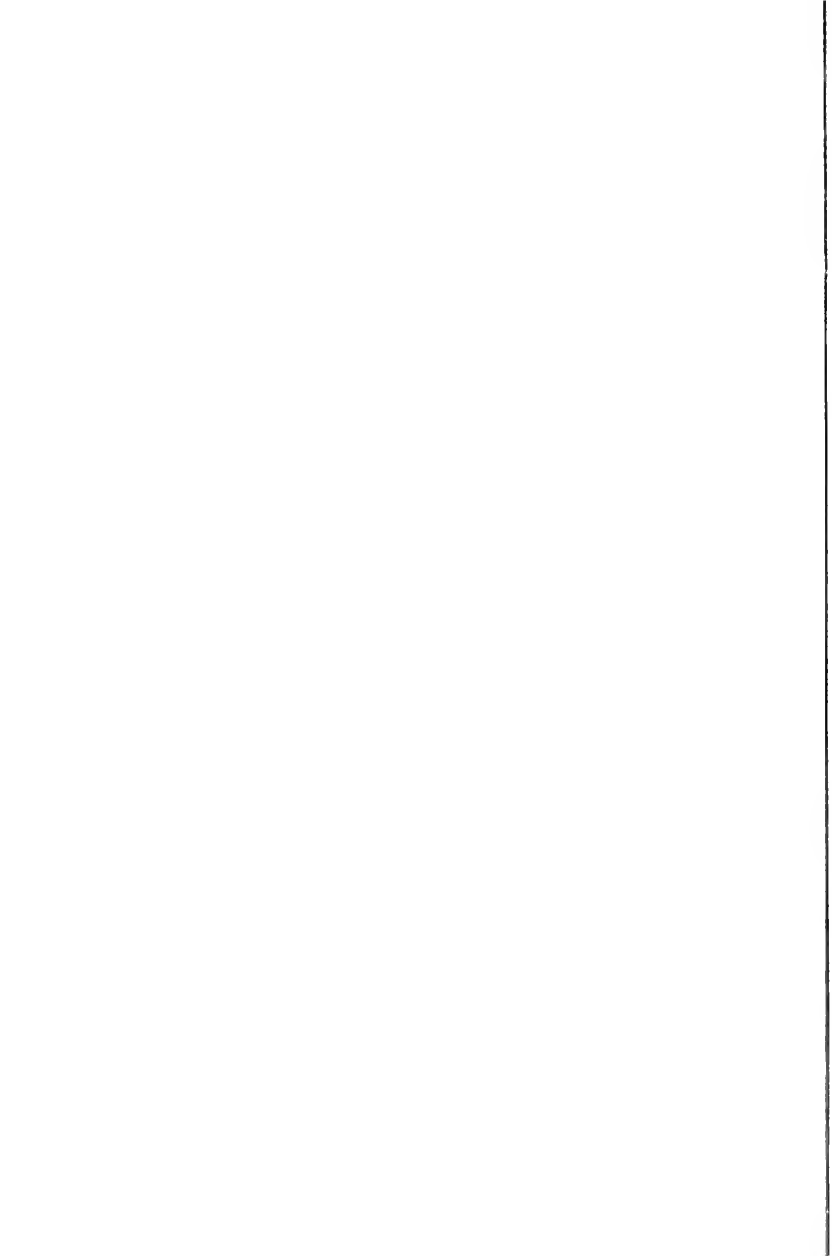
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DISEASES

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Original Communications.

A STUDY OF MYCOSIS FUNGOIDES, WITH A REPORT OF TWO CASES.

BY

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AND

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THE past few years have offered an opportunity for the continued observation, for a period respectively of two and nine months, of two cases of this comparatively rare disease. Both cases proved to be extremely well marked in the extent and violence of the cutaneous manifestations, and singularly free until within several weeks of their fatal ending of any serious involvement of the general health. This tempestuousness of the skin disturbance and practical absence of constitutional involvement is, in most cases, as in the two about to be reported, the most striking characteristic of this strange and essentially fatal disease. In one case an autopsy was obtained, and has lent interest to the other observations made. In addition to a study of the clinical phenomena of these two cases, such an opportunity was not to be overlooked for an investigation into the histological and possible microbic nature of the disease. The results of such investigation follow the presentation of the clinical notes.

Read before the American Dermatological Association, Washington, D. C., Sept. 25, 1891.

Clinical Notes, Case I. Thur F., a Russian woman, aged 43, thickly set and strongly built, of good general health, and dark complexion, was admitted into the skin ward of the Philadelphia Hospital, December 20, 1890. Owing to the ignorance of the patient, with the fact that she could scarcely speak any English, the history obtainable was far from satisfactory. So far as could be learned from her husband who was closely questioned upon several occasions, the disease dated back four or five months. It began, so he stated, as an itching eruption of an erythematous type extending over the arms and face. At this time or soon afterward an erysipelatous patch appeared over the surface of the metacarpo-phalangeal joint of the thumb of the left hand, becoming gradually, in the course of several days or a few weeks, swollen and elevated, forming a tumor of two to three inches in diameter and one-fourth to one-half inch in altitude. This persisted and grew somewhat more prominent, and finally broke down at the superficial central part, discharging a bloody mucoid fluid. A few weeks later the ulcer had grown to two inches in diameter, with a sharply defined elevated border and a crateriform fungoid central portion. At this time and for a month or two subsequently, erythematous and erysipelatous outbreaks, involving one or several parts, occurred. The patient was finally led through the discomfort and disfigurement produced by the eruption to seek advice.

At the time of admission into the hospital the conspicuous and only striking lesion was the fungoidal ulcerating tumor upon the hand. It was fully three to four inches across, rounded, the border considerably elevated, somewhat infiltrated and rather sharply defined against the surrounding healthy skin. It was painful to the touch, but the patient complained of but little spontaneous pain. The surface of the ulcer was mushroom-like, and attended with a variable sanguineous seropurulent discharge. In fact at this time the growth presented, when taken alone, the appearance of an epitheliomatous tumor, and such it was upon first glance considered. Upon examination of other portions of the general surface, however, it was found that a mild erythematous and eczema-like eruption existed upon the chest anteriorly, and to a slight degree upon the eyelids also. These symptoms together with the history were indicative of mycosis fungoides. No special treatment was ordered for the first several days beyond an antiseptic dressing to the ulcer. This began to extend slowly, the discharge now and then becoming offensive. In the course of ten days an ecze-

matous eruption appeared, involving almost the entire surface. Here and there, possibly in three or four regions, the eruption was erysipelatous in character, and was accompanied by considerable swelling, the erysipelatous flush gradually faded, the swellings remaining as somewhat flattened, slightly elevated, pinkish to reddish nodes or tumors, from one to several inches in diameter. One of these was upon the cheek, another upon the left forearm and another upon the breast over the sternum. These for a while gradually increased in elevation, with a tendency to become sharply defined against the surrounding skin. The tumor upon the forearm rapidly began to show a disposition to ulcerate, this finally, in the course of ten days to a few weeks, taking place, the surface gradually resolving itself into a mushroom-like ulcer. The tumor upon the breast slowly sank almost to the level of the surrounding skin, with the central portion, or that which had constituted the tumor proper, appearing pinkish-white, with a surrounding halo of one inch in depth of a bright pinkish or reddish color; the bright color faded slowly to a paler tint, assuming a more or less brownish hue. The patch, with its white centre and brownish or pigmented border was extremely suggestive of a patch of leprosy. The general eczematous eruption was followed by exfoliation, here and there slight and in other places profuse. During this time the tumor upon the hand had continued to involve a larger area, invading the palmar and dorsal surfaces. That upon the forearm after the fungoid character had been acquired showed no disposition to enlarge; in fact very little change was observed in these lesions in several weeks. The general eczematous condition did not disappear entirely, but remained as a sluggish-looking erythematous and scaly eczema. The scalliness upon some parts was exceedingly profuse, suggesting dermatitis exfoliativa. A few weeks later another general erythematous or eczema-like outbreak took place; or more properly speaking there was an extremely acute exacerbation of the already existing eczematous eruption. This was also attended by the appearance of several erysipelatous swellings. One of these was just under the lower eyelid, one on the leg, and a third over the metacarpo-phalangeal joint of the thumb of the right hand. That on the eyelid and that on the hand gradually broke down and ulcerated, the ulcers soon presenting the mushroom-like or fungoid surface. The ulcer on the latter region was exceedingly painful. The several other tumors which had as yet shown no disposition to ulcerate

were rather flabby and soft, without pain, and of a dull red color. In one or two places on the legs the tumors had made their appearance without the precursory generalized erythematous eruption.

At this date, about four to five months after her admission into the hospital, the conditions were as follows: Upon the left hand the ulcer had somewhat flattened out, but was gradually spreading and involving the greater part of the hand. On the forearm above were two swellings, one the size of a pigeon's egg and the other that of a hen's egg, the larger one with a small central ulcerated surface. Upon the right hand, upon the outer dorsal aspect, the ulcerating tumor was as large as a walnut. Upon this forearm was a small nodular swelling. On the face, just under and involving the lower left eyelid, there was a walnut-sized tumor with superficial ulceration. On the forehead there was one small flattened growth. On the breast the whitish spot, with the pinkish-brown periphery, already referred to, had almost disappeared. On the back there were three chestnut-sized reddish tumors, but with no ulceration. On the legs, especially the lower parts, three or four tumors of varying size presented, one of which showed the fungoid ulcerated surface. On one foot, involving a part of the sole and toe, was an egg-sized ulcerated tumor. There were to be seen here and there, probably six in number, patches of light pinkish-brown, slightly scaly skin, showing the sites of former tumors. The scalp exhibited no growths, but was red and scaly, with considerable hair loss. The general surface, almost in its entirety, was pinkish or reddish in color, with slight or profuse scaling. Thus the disease progressed, some tumors persisting, others disappearing, new ones coming, some ulcerating, the patient's strength being gradually undermined, death taking place September 5, 1890, just a little less than nine months after admission, and about a year after the first manifestations of the disease. Death was immediately preceded by an attack of vomiting.

This case was rather unusual, in the fact that the period of tumor formation was practically concomitant with the eczematous and erysipelatos outbreaks, the disease presenting in its very beginning the characteristic new growths. The accompanying skin symptoms were, however, decidedly eczematous. In fact, robbed of the tumors, the case would have been readily mistaken for an eczema. When an exacerbation took place, which happened every few weeks or month, some parts of the surface became almost erysipelatos, and where, as already remarked, tu-

mors were about to arise, simulated true erysipelas. Some of the growths which had appeared earlier in the course of the disease faded completely away, leaving no trace, or only a pinkish-brown, slightly scaly skin. Others disappeared partly, and then remained for some time as slightly elevated, flattened desquamating tumors. The large ulcerating tumor upon the hand fluctuated in its course somewhat, but was, upon the whole, steadily progressive. Occasionally, especially when there was a general exacerbation of the eczema-like eruption, the face would become considerably swollen. Indeed, in the whole course, the skin manifestations were made up of a medley of what could have been at different times variously looked upon as eczema, erysipelas, leprosy patches and new growths.

As to the general symptoms, an elevation of temperature was noticed usually at the time of the eczematous attacks; later, toward the end, the temperature was normal in the morning, and elevated a half to one degree in the evening; in the last month of the disease the temperature was rarely down to the normal, although it was seldom above 101. In addition to this, the patient was often nervous and restless. There was always a variable amount of itching and burning, sometimes distressing, at other times slight. The ulcerating tumors were, as a rule, very painful upon touch. The urine was examined upon several different occasions, but exhibited nothing abnormal. The lymphatic glandular system was not especially involved.

As to treatment, the local dressing to the ulcers were of the usual antiseptic nature, and the eczematous and other features of the eruption were treated by the ordinary applications. Internally, when the case first came under observation, the hypodermic injection of Fowler's solution was tried, but it proved so painful that the patient finally rebelled. The solution was then given by the mouth in increasing dosage. The effect was negative. Nux vomica in large and increasing doses was later tried, but with no result. It may be truly said that the constitutional treatment was absolutely without influence upon the course of the disease. An autopsy, it is to be regretted, could not be obtained.

Case II.—Morris P., aged 39, a native of New Jersey, of good frame and build, and a farmer, was admitted into the Jefferson Medical College Hospital January 14, 1891, under the care of Dr. William S. Forbes, and by him kindly transferred to the charge of Dr. Stelwagon, coming thus under our conjoint observation. According to the statement of the patient, and as also learned

through a letter from his former attending physician, Dr. E. L. Reigle, of Bloomsbury, N. J., the history of the case was as follows: Patient up to a few years ago had always enjoyed good general health, was a man usually of 160 pounds weight, of good habits, and had always lived in the country and led a farmer's life. He was married, and had several children, all of whom were healthy. His father died when aged 60 of "gravel and heart disease." Mother still living at the age of 70, and in good health. He has two sisters and two brothers living, at ages between 30 to 40, and all healthy. He never had any severe or any venereal disease. The starting point of his present disease was twelve or thirteen years ago, when he was about 26 years old, at which time there appeared at the anterior axillary fold of the left arm a reddened and slightly scaly patch: this grew somewhat larger, and remained about a year, and then, under some indifferent treatment, disappeared. It was somewhat itchy. A short time after this, so far as he can recall, about two months, several red patches appeared on the arms, which itched slightly; soon other spots appeared upon other parts, coming and going irregularly, the skin being never entirely free. The hands and face were not involved in the eruption at this time. Several physicians whom he consulted from time to time called it eczema. In spite of the eruption, he was comfortable, and enjoyed life. Several years ago he first noticed an eruption like hives, the lesions being pea to small cherry in size; they came and went like hives, and were present in numbers. They were exceedingly itchy. With short periods of remission, this type of the eruption lasted for several months. In this manner the disease varied from year to year. About a year ago the tumors proper began to appear, springing from the healthy skin; they were few in number, and were scattered, and about the size of cherries and solid in character. They came slowly, lasted a few months and then disappeared slowly. Nine months ago they began to make their appearance in larger number, and of increased size. They disappeared, but others continued to come much more thickly and larger and larger. Up to the appearance of these tumors he had been enjoying fairly good health, and had followed his business of farming. During their evolution, however, he was depressed and not feeling in his usual good health. Last August, that is, seven months before admission into the hospital, he was ill with what was thought to be pneumonia, and he believes that, with the possible exception of a few small lesions, that the eruption entirely

disappeared. This statement was corroborated by his physician, Dr. Riegle. Upon recovery, however, the cutaneous manifestations soon made their reappearance. The skin now began to be markedly eczematous and red and scaly, with here and there moist patches; the tumors returned, thickly studding the greater part of the surface. His general health now began seriously to suffer—he was obliged to quit work. There was, however, no open tumor until a month or two later.

When seen a few days after his admission, the following presented: The face was red, and in places crusted and scaly, and was the seat of numerous pea-to-cherry-sized tumors, few with tops abraded and oozing; on the chin the eruption looked like a highly developed case of tinea sycosis. The scalp, anteriorly, was studded with about fifteen to twenty small cherry-sized flattened tumors, some abraded. The left side of the head posteriorly, towards the mastoid region, down on to the neck, was crowded with tumors varying in size from a cherry to a small orange; some of these were three inches across, abraded, fungoid, and looking not unlike the cut side of a raw tomato. The other side of the head showed a few small elevated lesions. One growth on the scalp had broken down and was discharging a purulent fluid; one or two flattened out, with everted edges, and discharging freely, while others exhibited a tendency to become pedunculated and to surface ulceration. The upper part of the back was almost completely covered with variously sized tumors, some discrete, others aggregated and others almost confluent. These varied in size from a large pea to a walnut; lower down there were two or three with an open, raw-tomato-like surface, with a sanguineous muco-serous discharge. Some of these were flat and some rounded, soft and firm in consistence, and upon the whole suggestive of fibromata. The skin over this whole region was sluggishly eczematous in appearance, and to the sight as well as to the touch, thickened and infiltrated. On both thighs the lesions were numerous, of different sizes and different development—some small and rounded, others flat and others again open and presenting the typical characters of the fungoid tumors peculiar to this disease. In some the discharge seemed to be somewhat of the eczematous order. Some of the open tumors had a mushroom appearance, with a somewhat contracted basal portion. Both legs, especially towards the ankles and feet, were thickly set with variously sized tumors, a few of which were open and a few abraded, some in bunches and others apparently

confluent. In fact, the entire skin seemed invaded. The patient stated that those on the legs were twice their present size two months previously. The tongue was rough in its middle central portion, the papillae hypertrophied, and was suggestive of the condition seen in *leukoplakia buccalis*. Upon the whole body, it may safely be stated that there were from five to six hundred variously sized tumors. The eruption, as then presented, was made up apparently of eczematous symptoms, small pea-to-egg-sized tumors; egg-sized to tomato-sized fungoid discharging growths, several of which were to a slight degree, and several to a marked degree, pedunculated. In a few tumors necrosis of the interior portion took place, resulting in the production of sub-cutaneous abscesses. There was considerable itching complained of, and the lesions were somewhat painful. There was no special enlargement of the lymphatic glands. There was slight temperature fluctuation, but it was insignificant. The pulse was seemingly good. The general condition was fair, but the man was evidently feeble.¹ The disease varied in its further course from week to week, old tumors partly or completely disappearing and new ones making their appearance, the general aspect of the eruption remaining about the same. Examination of the urine made from time to time disclosed nothing abnormal. The man's condition grew gradually worse, the fever became more continuous, a diarrhoea set in, and under such symptoms death gradually took place, the patient dying March 4, 1891, two months after his coming under observation.

As regards the treatment of this second case, Fowler's solution was administered by hypodermic injection, beginning with five minims daily and increasing to fifteen minims. The tumors, taking them all together, lessened in size during this time, but it was probably to be attributed to the fact that the man's vital forces were becoming more and more depressed rather than to any specific action of the arsenical injection. This case, in addition to its striking symptoms, was remarkable for the fact of the apparently long period of the preceding erythematous and eczematous outbreaks, and for the comparatively short period of tumor growths, the whole course of the disease extending over twelve or thirteen years.

(To be concluded.)

¹ The patient was transferred on February 14th to Dr. Stelwagon's Skin Ward in the Philadelphia Hospital.

HYDRADENITIS DESTRUENS SUPPURATIVA

BY

S. POLLITZER, A.M., M.D., NEW YORK.

THE following case was kindly referred to me last winter by Dr. I. Adler of this city:

I. M., aged 20, born in this city, of German parentage, engaged in a manufacturing business, has had the usual diseases of childhood, and enjoys in general good health. He is of medium build, not very robust looking, of dark complexion and of a remarkably nervous temperament, being subject occasionally to nervous explosions of a decided hysterical character. His family history is good; no syphilis nor tuberculosis; he is one of six children, all of whom are in excellent health; he has never before had any skin disease, not even Acne. He looks older than he actually is, and has for his years an unusually strong growth of beard. The affection for which he consulted me appeared about four months before, without any assignable cause. It had from the beginning the same characters which it bore throughout its entire course.

The eruption was limited to the face and neck. The sides of the cheeks, the chin, the region below the lower jaw, the front and sides of the neck and the shoulder at the root of the neck, were the seat of about twenty lesions in different stages of development. These appeared, 1. as slight round nodular elevations of the skin of the size of a pea, reddish in color, some of them yellowish in the middle, as if they contained pus; over others, the horny layer had cracked, and was desquamating in concentric rings. 2. Small discolored crusts over the middle of what had been nodules. 3. Slightly depressed round or oval scars and discolored patches averaging a centimetre in diameter. On careful palpation there could be made out, furthermore, numerous small hard round or oval nodules in the subcutaneous or deep cutaneous tissue. These could be rolled about between the finger and thumb and gave the sensation of a bird-shot imbedded deeply in the skin. They were entirely painless on pressure, and indeed there were no subjective symptoms at all in connection with the affection, except occasionally a little itching.

A few weeks' observation showed the relations of these different lesions to each other. The lesion begins as a deep cutaneous nodule which the patient generally discovers accidentally

by palpation. These nodules appear to be situated in the subcutaneous tissue, and do not involve the superjacent skin which shows as yet not the slightest change. They may be rolled about or squeezed without producing a painful sensation. Gradually they begin to enlarge and by the end of ten to fourteen days they have attained the size of a pea. The epidermis is now raised above the general level of the surrounding skin, and the appearance of a small round tumor is produced. Pressure on this is slightly painful. The skin over the tumor is reddened in color, and sometimes the upper layers of the stratum corneum yield to the pressure from below, crack and scale. The growth has now reached the upper layers of the cutis, and the skin is no longer movable over it. If the tumor is incised at this stage a drop of pus is extruded, a drop or two more following during the next few days, and then retrograde changes begin. If it remains undisturbed, in the course of a few days more the middle of the tumor appears yellowish in color as if it had become purulent, and then the epidermis is broken through and a drop or two of creamy pus mingled with a little blood and sometimes with small shreds of tissue flows from one or more minute openings. If the secretion is not removed by frequent washing it may dry into a discolored crust which as it dips into the pinhole openings into the epidermis is sometimes quite firmly adherent. If it be left undisturbed, the crust falls off after a few days, and the dark-reddened skin under it remains pigmented for many weeks, a slightly depressed scar ultimately marking the site of the tumor.

From the development of the deep nodule to the production of the scar requires about four weeks; ten to fourteen days till the nodule attains the size of a pea; four or five days of suppuration or crusting; and about two weeks for the absorption of the infiltration leaving the scar.

Exceptions to this course were noticed in a few instances. Several nodules developed in close proximity to each other, coalescent and formed a firm flat tumor of the size and shape of an almond (1.5 x 2.5 cm.) which finally discharged through many minute openings. In a few instances the small deep nodules did not increase in size nor undergo suppuration, but remained as if aborted in their original form, unchanged for many months. Two such nodules may be felt to-day, nearly a year after their first appearance.

The greatest number of tumors occurred over the horizontal

rami of the lower jaw and under the chin. In these regions there was a dense growth of hair, but in no case were the hairs loosened, and from the shallow cicatrix the hairs afterwards grew normally, indicating that the destruction of tissue did not involve the hair follicles. The little tumors appeared in crops numbering from one or two to half a dozen or more, and the successive crops developed at irregular intervals of a few days to several weeks; but at no time during the nine months over which the affection extended was the patient free from developing nodules or their recent traces, and for the greater part of this time all the various stages of development, from subcutaneous nodule to fresh cicatrix or macule, were to be found at once. The affection seemed to have attained its maximum intensity soon after I saw the patient; that is, in the fourth or fifth month. At that time as many as twenty-five lesions representing various stages of development were present on the face and neck. From that time on the nodules began to appear in crops of smaller number and at longer intervals, the last nodule to attain its full development occurring at the end of the eighth month. The neighboring lymphatic glands were not swollen; there was never any rise in temperature; repeated examinations of the urine revealed neither sugar nor albumen.

Diagnosis.—In arriving at a diagnosis the following affections were considered; Acne, Brom-acne, Acne cachecticorum, Furuncle, Trichophytia barbæ, and Syphilis.

Acne could be excluded on the ground of the development of the lesions from subcutaneous nodules; from the absence of comedones and of any true pustules through the apex of which a hair passes, and from the exclusive location in the beard and on the neck.

Brom-acne was excluded because the patient had not taken any bromides, as well as from the appearance of the lesions which lacked the tendency to the papillomatous development of brom-acne.

Acne Cachecticorum occurs in strumous individuals, affects all parts of the integument, is usually accompanied by lichen scrofulosorum, and the lesions consist of pustules which are generally surrounded by an erythematous halo. These features sufficed to exclude it.

Furuncles are accompanied by severe inflammatory symptoms, notably by great pain, form conical elevations and terminate after the discharge of a central necrotic mass. These features were not present in our case.

Trichophytia barba was suggested by the large nodules which somewhat resembles smaller bosses—infiltrated nodules—of tinea. The non-involvement of the hairs, and the absence of the fungus from hairs which were extracted, excluded this affection.

Syphilis, particularly the form of tuberculo-ulcerative syphilide described by Bazin¹ as syphilide gommeuse, presented many features in common with our affection, especially in respect to the development of the nodes from small subcutaneous nodules and their appearance at their acme. But aside from the complete absence of anything in the patient's history to indicate acquired or hereditary syphilis, the further course of the nodules excluded this affection. In the syphilide gommeuse the nodule breaks down in the middle and produces an ulcer with the usual characters of a syphilitic ulcer.

I need not go farther into the differential diagnosis of the disease. Its evolution and course characterize it so distinctly that it must be impossible to confound it with any other affection. It appeared to me at the beginning that the affection was one which has not before been described; and though it proved later that this was not the case, the extreme rarity of the disease, as well as the absence of any mention of it in most of the standard works on dermatology, may plead in extenuation of this assumption.

Treatment.—I regarded the affection on clinical grounds as infections in its nature, and directed the treatment accordingly. Shaving with the razor was interdicted, this necessary operation being performed by means of a Barium sulphide mixture (itself an antiseptic), and each nodule was covered with a piece of Unna's mercurial carbolic acid plaster. The nodules were incised before their spontaneous rupture and the usual antiseptic precaution taken. Frequent washing of the affected region with a three-per cent. salicylic acid alcoholic lotion was directed. Toward the termination of the disease, mercury and iodide internally (potass. iodid., 10.0; hydarg. bichlor., 0.15; aquae, 90.0, M.D.S. \mathfrak{z} i. t. i. d.) was prescribed. I ordered this mixture not because I even suspected syphilis, but because of the beneficial effects of these drugs in suppurative affections and in hastening the absorption of infiltrations generally. While their action seemed to be, on the whole, favorable, there was certainly nothing like the rapid disappearance of the lesions that might have been expected in syphilis, and nodules continued to appear,

¹ *Léçons sur la Syphilis*, Paris, 1866, p. 339.

notwithstanding this treatment. Cod-liver oil and tonics would probably have done as much.

Anatomy.—For the purpose of histological examination, two nodules were excised from the neck—one, small, hard, oval subcutaneous, in the early stage of development, the other at a later stage shortly before the probable rupture of the epidermis. The specimens were hardened in alcohol, and embedded one in celloidin, the other in paraffin. It is to be regretted that a specimen was not fixed in Flemming's solution; but as I desired to stain for bacteria, and as the patient could not be induced to give up more than two nodules, I was practically limited to alcohol as the fixing agent.

The two specimens showed virtually the same changes; they differed only in the degree and in the amount of tissue involved. In the small subcutaneous nodule the changes proved to be rather sharply limited to an oval mass, one millimeter in vertical by two in horizontal diameter, situated at the junction of the subcutaneous areolar tissue with the cutis. In the larger nodule the changes were less sharply limited to a spherical mass, involving the skin from the upper region of the subcutaneous tissue below to the papillary layer above.

The tumors consisted of a dense aggregation of small round cells, epithelioid cells and large multinuclear masses resembling giant cells. The round cells were of the character of ordinary inflammatory cells. They were distributed throughout the entire tumor, but were most abundant at its periphery. In the larger tumor a moderate degree of perivascular infiltration was observed in the papillary layer and in the subcutaneous tissue at the borders outside of the main body of the new growth. The epithelioid cells occurred indifferently in various portions of the tumor. They were generally arranged, however, in groups; ten or fifteen cells occurring in a cluster separated by infiltration tissue from another group of perhaps equal number. The members of each group, however, were themselves separated sometimes quite widely by infiltration tissue, and the groups not well defined; but there were large regions, wholly free from such cells, interposed between other regions in which these cells abounded. The individual cells were frequently multinuclear, containing from two to five nuclei, and forms could be traced which merged by indistinguishable gradations into the giant cells.

The latter, like the epithelioid cells, occurred also in groups, but in groups more sharply limited. Sometimes a cluster of three

or four of them were found almost in contact with each other, or separated by only a single line of round cells (see Fig. 3). They never occurred singly; the presence of one such cell was a certain indication of many more in its immediate neighborhood. They were present in astonishingly large numbers; as many as twelve were counted in so small an area as that included in the field of a Zeiss Objective D. The nuclei of these cells, from five to twenty in number were arranged sometimes peripherally, commonly, however, scattered promiscuously throughout the body of the cell, and occasionally limited to one segment of the cell. The cells themselves were, as a rule, somewhat smaller than the giant cells that occur in tubercular processes and other granulomata. They were generally irregularly round or oval in shape, but there were many of bizarre form among them; so, for instance, there were not a few of the shape of an ellipse of large eccentricity, and some large ones which were curved in the form of an L. All the gradations, however, between the circular and the very irregular forms were observed. Fig. 4 illustrates a group of these cells. Toward the centre of the larger, the older growth, all these elements were merged together in the greatest disorder, and the entire region assumed something of an homogeneous appearance, the nuclei of all the cells taking the stain somewhat feebly.

The blood vessels could be traced throughout the entire growth. Their endothelial cells were generally swollen, to such an extent in some of the capillaries near the middle of the tumor as to occlude their lumen entirely. The hair follicles, which were numerous and large in and around the new growth, appeared perfectly normal. At the side of the tumor follicles were observed in an abnormal oblique position, evidently pushed aside by the tumor. Within the new growth itself, the infiltration never extended into the follicle, the denser connective tissue which constitutes a kind of capsule to the follicle limiting the infiltration. The sebaceous glands, which in the region from which the specimens were derived, are small, appeared also unchanged.

The sudoriparous glands of the neck are large and numerous. They occur throughout the entire extent of the cutis, from its upper layers down to its junction with the subcutis. Nevertheless there were none to be found within the limits of the new growth. At the periphery of the tumor, however, and in the cutis immediately bordering the latter, sweat glands were observed. Many of these showed peculiar changes. The epithe-

lumen of the coil was swollen, frequently obliterating the lumen entirely, the contours of the cells were indistinct, and their nuclei stained feebly with hæmatoxylin. In some of the coils these were the only changes. In others similar but more marked changes were observed. The coil was the seat of a moderate amount of infiltration; the connective tissue between portions of the coil was somewhat proliferated; the swollen epithelial cells completely obliterated every trace of a lumen; and their individual contours had disappeared entirely, the epithelial lining of the canal being merged into one homogeneous mass with only the feebly tingible nuclei to indicate the original position of the cells. In such glands the membrana propria of the epithelial tube could not be made out; it had probably become merged into the altered epithelium. At the same time, while almost every trace of the intimate structure of the gland was lost, the arrangement of the whole, the grouping of the parts, the figures produced by cutting the coiled cylinder transversely, obliquely and longitudinally made every doubt as to the originally glandular nature of the structure impossible. Such a gland is pictured in Fig. 1, and a part of the same more highly magnified in Fig. 2.

Pathology.—It is evident that the process described is that of an acute diffuse inflammation terminating in suppuration. The points which it is of interest to determine are first, the significance of the bodies described as giant cells, and second, the point of origin of the process.

As to the giant cells which constitute so striking a feature in the microscopic picture, there is no doubt in my mind that they are formed of degenerated and broken up fragments of the sweat-gland epithelium. The following considerations have led me to this conclusion:

1. The sections do not present the picture of a granuloma in which the granulation tissue becomes denser and denser towards a more or less necrotic center in the middle of which one or two giant cells are located. Giant cells, moreover, are known to occur only in chronic inflammatory affections, and the relative acuity of the disease here described alone creates a doubt as to the giant-cell nature of the cells.

2. The cells are in incomparably greater number than in any granuloma, and they are never single, but always in clusters, numbering sometimes twenty or thirty.

3. They are as a rule smaller than typical giant cells, and on the whole of far more regular outline. Nowhere did we find a

typical large giant cell with its irregularly crenated border and its regularly arranged crown of nuclei.

4. Elongated curved giant-cell masses occur which have the shape of parts of a sweat-coil.

5. Giant cells occur which still show faint markings like the tracings of the original contours of cells.

6. Giant cells were found in a few instances aggregated in groups lying outside of the main growth, which have in every respect the habitus of a coil-gland; and finally, sweat-glands were found whose epithelium showed the beginning of the changes which could result in the formation of such giant-cells, namely, swelling and agglutination of the cells, which diminished tingingibility of their nuclei.

In short, we have a complete chain of evidence, beginning with parenchymatous degeneration of the sweat gland epithelium and its coagulationnecrosis, to the final dissociation of the altered epithelial masses, into fragments resembling giant cells. Similarly the epitheloid cells, which are present in great number, and which occur in various shapes from a typical epithelial cell to a multinuclear mass like a giant-cell, are probably formed in the same way, by a breaking up of the degenerated gland epithelium into fragments smaller than those which resemble giant cells.

I am aware that this mode of formation of giant cells—degeneration giant cells—in the skin has not before been described. A similar mode of formation of such cells has, however, been described elsewhere by Waldstein¹ for instance, in tuberculosis of the testicle, and by Taylor and Van Giesen² in diffuse orchitis. *I have, in the light of the conclusions arrived at here, examined again many sections of syphilitic affections of the skin, and I have satisfied myself that many of the cells described in this disease as giant cells are not formative cells, but are the products of the degeneration of the sweat gland epithelium.* I expect in a future communication to report more in detail on this subject.

As to the starting point of the pathological process, it is clear that the changes affect the sweat glands principally, and that these are the seat of a parenchymatous degeneration. The question, however, to be determined is: Is the parenchymatous degeneration primary or is it secondary, or, in other words, Do the changes in the sweat glands originate in them, or

¹Virchow's Archiv., 1879.

²Am. Jrl. Med. Sc., 1888.

are these organs changed secondarily, and only in consequence of a diffuse inflammatory process involving the entire cutis of which they form a part? The question cannot be answered with absolute certainty, but there is enough evidence to leave but little room for doubt that *the process is primary in the sweat glands*. There is no other way of accounting for the marked parenchymatous degeneration to be found in many places associated with scarcely any signs of diffuse inflammation. In the gland pictured in Fig. 1 there were profound changes in the epithelium, with comparatively little infiltration or connective tissue proliferation around the coil.

I imagine the process to begin with swelling of the sweat gland epithelium, whose protoplasm becomes granular. As the cells enlarge they merge into each other, their outlines disappearing, while the lumen of the gland becomes obliterated. The degenerated gland now acts as an irritant, induces changes in the blood vessels and emigration of white blood corpuscles begins, and there is also some proliferation of the connective tissue cells in the immediate neighborhood of the affected gland. We have then a parenchymatous inflammation becoming diffuse. The leucocyte infiltration becomes gradually more and more intense, it invades the parenchyma of the gland itself and the degenerated epithelium breaks up into fragments, which become separated by the infiltration, in the midst of which they are finally found as masses resembling giant cells. At the beginning probably only one or two glands are affected, but gradually adjacent glomeruli are drawn into the process, till finally a relatively large tumor results, which includes all the sweat glands of the affected region, whose interglomerular spaces are the seat of an intense infiltration, which gradually becomes purulent. In the destruction of the gland-epithelium the glands situated deepest in the cutis, at the junction of cutis and sub-cutis, are broken up before those situated higher, probably because, unlike the latter, they are not protected from the leucocyte invasion by the dense layer of connective tissue which constitutes a capsule.

As to the cause of the disease, I have already said that on clinical grounds I regarded it as of infectious origin; and bacteriological investigations were made to determine this point. Cover-glass preparations of fresh pus from an incised nodule were stained by Weigert's and by Kühne's method, but no organisms whatever were found. Similarly sections stained for germs yielded negative results. Plate cultures made with

agar-agar, inoculated with fresh pus, taken with the usual precautions from an incised nodule, remained sterile, except that some common germs developed on some of the plates, such as the staphylococcus pyogenes and the bacillus prodigiosus. I regret that I was unable to make direct inoculations with the pus in animals. Notwithstanding these negative results, I am inclined, as well on anatomical as on clinical grounds, which must be clear to the reader, to regard the affection as infectious. It is not impossible, however, on the other hand, that the disease may be caused by some noxious chemical agent produced elsewhere in the system (a ptomaine developed, for instance, in the intestinal canal), which induces parenchymatous degeneration in the sweat glands through which it is excreted, with secondary and concomitant inflammation. The aetiology of the disease must, however, be left for the present undetermined.

Nomenclature.—I have called the disease *Hydradenitis destruens suppurativa*. For an inflammation of a sweat gland there is in accordance with the principles of medical nomenclature only one name possible, that is Hydradenitis (ὕδωρ, water, and ἀδής, a gland.) The qualifying adjective *destruens* was selected to indicate the most characteristic pathological feature, the complete destruction of the affected gland. The term *suppurativa* was added to distinguish this form of hydradenitis from other possible forms which may terminate differently; for it is not unlikely that there are other forms of sweat gland inflammation. A further qualifying term might be added to indicate the region affected, like *capitis*, *facialis*, *generalis*, etc., for, as we shall see presently, the disease may affect any portion of the integument.

The term Hydradenitis which was deduced from a study of the histology of our case, suggested the disease described by Bazin¹ under the name of *Hydrosadenite syphilitique* an affection which is regarded by some as a form of pustulo-ulcerative syphilide, by others as a milium gumma, which had before been described by Bazin as *syphilitide gommeuse*. He had renamed the disease, he tells us, having become convinced by Verneuil's paper on *Hydrosadenite phlegmoneuse* that his syphilide had its seat in the sweat glands. With this clue, a very interesting though limited literature of the subject was disclosed.

Verneuil,² in 1864, published a paper under the title of

¹ Loc. Cit.

² Archiv. Generale, 1864, II. p. 537; 1865, I. p. 327.

Hydrosadenite phlegmoneuse et abcès sudoripares, describing an affection which he regarded as a phlegmonous inflammation of the sweat glands. Velpeau,¹ in 1835, had described a circumscribed inflammation and superficial abscess occurring in the axilla, near the anal orifice, and at the nipple. Richet,² Nélaton³ and Chassaignac⁴ had described the same disease, but had not recognized its anatomical relations. Verneuil, as early as 1854, had taught in his clinique that the Velpeau's *abcès tubériformes* occurring in the axilla had their origin in the sweat glands, and published a note⁵ on the subject in 1857. Later observations strengthened his opinion, and in 1864⁶ he set up as a distinct class the phlegmonous inflammations of the sweat glands under the name *Hydrosadenite phlegmoneuse*.⁷

The disease which he describes under this name, in the admirable style of the French clinician, agrees so perfectly in every detail with the case that I have attempted to depict above, that it would be a waste of words to repeat the description. I may add a few facts, however, drawn from Verneuil's larger experience to complete the picture. The lesions occur most commonly in the following regions: axilla, anus, nipple, scrotum and labia majora, though the disease may develop wherever there are coil glands, that is, over the entire integument. The causes which may produce the disease are local and general. Among the local causes are uncleanness, cold, rough friction, irritating applications, parasites, etc. The systemic causes enumerated are "herpétisme," dyspepsia, constipation, hæmorrhoides, pruritus, scrofula, cachexie and the fevers. The disease affects both sexes equally, and is more common in young adults than at the extremes of life.

There was no histological examination of a nodule made, and the conclusion that the affection is located in the coil glands was based wholly on clinical reasoning. I need hardly say that the modern pathologist would not admit the propriety of Verneuil's qualifying term *phlegmonous* for the disease whose pathological anatomy I have described above.

¹ Dictionnaire de Méd., 2me éd., 1835-9; Articles, Aisselle, Anus, Mammelles, and Clinique Chirurg. t. II. p. 133.

² Anatomie Médico-Chirurg., 1855, p. 793.

³ Elem. de Pathol. Chirurg., t. V., p. 870, 1859.

⁴ Traité de la Suppuration et du Drainage Chirurg. t. II., p. 257, 500, 508, 1859.

⁵ Gazette hebdom., t. IV., p. 555, 1857.

⁶ Loc. Cit.

⁷ It requires no philologist to point out that the compound should be written *Hydradenite*, *Hydradenitis*. *Idrosadenitis*, from ἰδρῶς, sweat, would be more correct but is awkward.

The disease first described by Verneil received very little or no notice from dermatologists generally. Bazin, as we have seen, adopts Verneil's views for his *syphilide gommeuse*. The English translator of Hebra's Treatise tells us that parts of that work was entirely re-written for the English Edition, 1866, among them Chap. V. on the Diseases of the Cutaneous Glands. In the opening paragraph of that chapter we read that the sweat glands are subject to functional disorders only, "for, up to the present time, the, sudoriporons glands have not been shown to be subject to any structural affections." Neumann devotes ten lines to the disease. Kaposi, p. 160, disposes of the question in half a dozen lines. He does not admit the existence of the disease as a distinct affection: the glands are affected only as part of the general inflammatory process of the skin. Indeed, the only account of the affection which I have been able to find in a German work is written by Geber in Ziemssen's Hand-book under Inflammations of the Sweat-glands. Geber believes that the disease is quite common, but he describes as its type an affected gland from the peri-anal region in which the disease has many peculiar features, such, for instance, as its frequent termination in a *fistula ani*. His description of the pathological anatomy of the disease agrees with mine so far as it deals with generalities, but differs radically in essential details. We have, for instance, no mention of so striking a feature as the enormous number of pseudo-giant-cells. This need not surprise us, however, for he tells us that the first changes which inflamed sweat-glands undergo, are, since they present absolutely no indication for an examination, seen only by chance in a microscopical examination of other specimens of the skin. In short, the perusal of his description leaves the unavoidable impression that it is based rather on general principles than on actual observation.

Erasmus Wilson¹ condenses Verneil's description into a dozen lines. Fox² gives a good though short description of the disease, of which he has seen several cases. Crocker³ describes it briefly under the chapter on *Furunculus*. In his experience the affection is generally "connected with hyperidrosis." American authors do not mention the disease at all, or give it only meagre attention.

It seemed that the disease was in danger of being dropped

¹ Diseases of the skin, 6th Ed. London, 1867, p. 808.

² Skin diseases, 3d Ed. London, 1873, p. 485.

³ Diseases of the skin, London, 1888, p. 231.

from our dermatological nosology entirely, and even in Paris the affection was so far forgotten that in a recent conspicuous example it was not diagnosed.

The work on my case was practically finished and the conclusions as to its nature are arrived at, when Barthelémy's paper on Acanthis¹ reached me. Barthelémy describes three cases, one from Fournier's the others from Besnier's clinic, of an affection which he regards as a form of general disseminated folliculitis and perifolliculitis. His excellent clinical description of the disease coincides in every detail with Verneuil's description of hydradenitis, and from it alone there is no room for doubt as to the nature of the affection which Barthelémy publishes as a hitherto undescribed form of disease. His cases differ from mine only in their greater severity, the characteristic nodules occurring over a large part of the integument, even on the fingers and on the plantar surface of the toes in one of the cases. A *résumé* of Barthelémy's paper is published in this JOURNAL for August, 1891, p. 304, and need not be repeated here. It appears that the diagnosis hydradenitis of Verneuil was considered and apparently rejected; but no reason for excluding this affection is given. We read in the description of one of the cases, "as there are no sebaceous glands in this region (the plantar surface of the toes), M. Besnier rejected the idea of an acne, and thought rather of hydradenitis, that is a special inflammation of the sweat-glands," (p. 16)—and nothing more on the subject. I venture to suggest that the eminent dermatologist referred to was led away from his diagnosis of hydradenitis by the report of the histological examination of a nodule submitted by M. Suchard. The specimen was lost before more than a superficial study of its histology was made and Suchard reported merely that the nodule consisted of a circumscribed tumor made up of round cells which invaded all the structures of the skin. He could make out nothing as to the point of origin of the process.

When it is borne in mind that no histological examination of Verneuil's hydradenitis had ever been made, it is not unreasonable to suppose that the diagnosis of that affection was rejected as the result of Suchard's report.

A nodule from one of the later cases was submitted to Darier for histological study. Darier found that the new formation was made up of round cells especially abundant at the periph-

¹Annales de Dermat. et Syph. II., 1.

ery of the tumor, of epithelioid cells in large number, of giant cells in great abundance and of various sizes and shapes, some large and typical with granular center and ring of nuclei, others smaller and with fewer nuclei, resembling epithelioid cells. The latter he thought were giant cells in course of development. The precise point of origin of the process could not be made out, but the foci of inflammation which together made up the whole tumor appeared to be grouped around the lower portion of a hair follicle. The affection was regarded as infectious, but the search for bacilli resulted negatively, and inoculation of guinea-pigs with fresh pus was equally without result.

It must be apparent even from this brief outline—and far more from the full text of Darier's report—that the microscopical picture agrees with mine not less than the clinical. We differ only in the interpretation of the histological data. That the process was regarded as peri-follicular is quite natural, for the sweat glands are situated all around, and frequently in very close proximity to the hair follicles. I am sure that had it been his good fortune as it was mine to find sweat glands showing incipient changes so excellent a histologist as my friend Darier would not have been in any doubt as to the origin of the process, and would have found an explanation of the remarkable occurrence of such numbers of giant cells in an acute inflammation.

In a recent publication¹ a paper from Kaposi's clinic appears under the title "Folliculitis Exulcerans, a hitherto undescribed skin disease," by Lukasiewicz, describing an affection which in some respects resembles strikingly the disease which forms the subject of this paper. A woman of twenty-four years has scattered over her arms and legs groups of lesions made of pale-red nodules of the size of a lentil, some covered with scaling epidermis, others with a crust, whose removal reveals a red, granulating ulcer with moderately infiltrated raised borders. The lesions are in part isolated, in part grouped in plaques two to four centimeters or more in diameter. The ulcers resulted from the breaking down of the nodules, and healed slowly, leaving shallow scars. Later, similar nodules developed in the perianal region, over the tuber ischii, and in the genito-crural fold. In the middle of the tibia two sharply limited periosteal nodes appeared later, accompanied by pain and redness of the skin, one of which afterwards broke through, discharging pus and leaving a fistula at the bottom of which there was no exposed

¹ *Ergänzungshefte zum Archiv. f. Dermat. u. Syph.*, September, 1891, II.

bone. Syphilis was excluded by a very extensive course of mercurials and iodine.

The space at our disposal precludes the possibility of an exhaustive analysis of this interesting case, and I can scarcely more than refer to the striking resemblance between it and the disease described by Bazin as *hydrosadenite scrofulense*. We have in the latter the same development of shallow ulcers from cutaneous nodules, occurring isolated and in plaques, lasting sometimes for years, and not accompanied by Adenopathies. The reader who may be interested is referred to Bazin's publications.¹ It is true that the author considers Scrofuloderma in the differential diagnosis of his case, but he considers only that form which has its origin in the subcutaneous tissue,—the “*écrouelle cellulaire*” of Bazin,—and does not mention the “*écrouelle ganglionnaire*” or hydradenitis scrofulosa which according to Bazin has its origin in the sweat glands. So also, it may be remarked in passing, the “*acutis*” of Barthelémy is excluded, his paper having evidently been favored with not more than a casual perusal. “We regard it as a sub-acute variety of *acne vulgaris*,” it is remarked (p. 62). A very wonderful variety of acne it must indeed be which occurs on the *planta pedis* where there are no sebaceous glands !

The suspicion that this folliculitis exulcerans is a variety of hydradenitis is very much strengthened by the histological account which Lukasiewicz gives. His description of an intact nodule agrees with Darier's and with mine to the smallest detail, except that like Darier he too does not find a sweat gland showing the beginning parenchymatous changes which I have described. He believes that the affection has its origin in the sebaceous and in the sweat glands (a strange pathological hybrid), but does not mention the sebaceous glands again except to say, that in an early stage the chief changes appear to be localized around them, the hair follicles and the sweat glands (p. 68). The sharply circumscribed new growth, made up of round, epithelioid and giant cells occupies the region of the sweat glands, and in places part of a glomerulus appears at the border of the tumor which has taken the place of the rest of the coil. The author nevertheless does not show any connection between the sweat glands and the origin of the process, nor does he offer any explanation of the presence of the enormous numbers of epithelioid and giant cells.

¹Leçons sur la Syphilis, Paris, 1866, 2me. Ed. p. 363; Leçons sur la Scrofule, 1861, p. 318, and Obs. LV. p. 590; also Jrl. de Med. et de Chir. t. 37, p. 445, 1866

Altogether, a careful study of Lukaszewicz's paper leaves a strong suspicion that the folliculitis exulcerans, Kaposi, is a variety of hydradenitis.

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THE DRY POULTICE IN THE TREATMENT OF EPIDIDYMITIS.¹

BY

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THE object of this communication is to call attention to a method of treatment, which I have found especially useful in the management of gonorrhœal epididymitis; and which, although used to a considerable extent in France, has not, as yet, received in this country the attention it deserves.

The method to which I refer is, by means of a simple dressing which I have ventured to call the *dry poultice*, for the reason that it possesses all or nearly all the advantages of an ordinary flax-seed poultice in such cases, without its disagreeable features.

The dressing consists in a moderately thick layer of cotton-wool applied over the inflamed testicle, this is covered by a layer of thin rubber protective tissue so fashioned that it completely incloses the diseased organ with its edges extending on to the healthy skin of the scrotum in a manner to partly overlap, but not entirely inclose, the healthy side. This is secured by a snugly-applied gauze bandage, and the whole held in place by a suspensary.

This dressing was, I believe, first suggested by Langlebert, who, in a paper² published in 1889, spoke very highly of its advantages and briefly described the following incident occurring in the practice of his father some years before, which led to its adoption. An attractive young woman called upon the elder Langlebert, seeking treatment for a severe intercostal neuralgia. Upon examination the principal area of sensitiveness proved to be in and about the left breast. She accompanied her petition for relief by the request that no blister or other form of local application be used, which would disfigure or permanently discolor the skin of that particular region. He therefore applied to the breast an impervious dressing of cotton-wool and rubber tissue

¹Read before the American Association of Andrology and Syphilology, Washington, D. C., September 25, 1891.

²Annales des maladies des organes Genito-Urinaires. April, 1889, Paris.

in the manner already described. Three weeks later, the patient returned with the report that the pain had entirely disappeared. On removing the dressing, however, to the great surprise of the doctor, and still greater surprise and mortification of the patient, it was found that the once shapely and well-developed gland had almost completely atrophied. The logical conclusion was drawn that any procedure which would cause the rapid absorption of normal adipose and glandular tissue of the breast, would also be likely to promote the absorption of inflammatory products. His first experiments were made upon patients suffering with epididymitis, which proved so satisfactory that he had a suspensary bandage constructed of cotton and rubber tissue on the principle of the original dressing, which he found to be most useful in the treatment of inflammatory indurations of the testicle and epididymitis, and also in subduing the pain and tenderness usually present in the acute stage of these affections. The success which attended the use of these suspensary bandages was so positive that it led to the manufacture and extensive sale of many similar forms of suspensary bandage throughout France.

In the treatment of epididymitis almost every variety of dressing and local application has been suggested. These are found to be of value in proportion to the number of requirements which they meet in furnishing heat, moisture, immobility, suspension, compression and counter-irritation. In the acute stage of the disease the chief indications to be met are to relieve the hyperæmia and resulting pain. This is, perhaps, best accomplished by the application of the Paquelin cautery, which insures severe counter-irritation, or by means of the old-fashioned treatment of rest in bed and a flax-seed poultice, which insures immobility, heat and moisture. Later, when the pain has been relieved, strapping, painting with iodine, or the application of various ointments are resorted to for the promotion of absorption, for these supply compression and mild counter-irritation.

In the use of the impervious rubber and cotton dressing, properly applied, all of these indications can be met, and for that reason it should, theoretically, be of great value in the treatment of this condition.

Acting upon the suggestions furnished by this report of Langlebert, and with a desire to practically test the value of this method, I began a series of experiments at the Vanderbilt clinic during the summer and autumn of 1889. It was at first applied to all cases of gonorrhœal epididymitis, acute and chronic;

later to a few painful cases of tubercular disease of the epididymis and to a single case of genito-crural neuralgia.

My records show that during the year which followed, between twenty-five and thirty cases of epididymitis were treated in this manner. As it would be a useless expenditure of time to report each case in detail, I will refer to but three—the first three which appear on the record—as these furnish a fair sample of all.

Case I. was a young man suffering from his first gonorrhœa. He complained of severe pain in the region of his testicle. Upon examination, the epididymis was found to be enlarged to the size of a small orange, and was acutely sensitive. His sufferings were so intense that he walked with the greatest difficulty. The diseased organ was dressed in the manner described, and he was treated as an ambulant patient. Two days later he reported that the pain had entirely disappeared, and the induration was found to have markedly diminished. On the eighth day it had been reduced to one-half its original size, and on the fifteenth day only a small nodule remained.

Case II. was one of double epididymitis, one several days old, and sub-acute, the other recent and very painful. In this instance also the absorption of the inflammatory induration was rapid, and at the end of four weeks but little remained. The pain, though relieved gradually, was not wholly absent for three or four days.

Case III. was a severely painful one, which had resisted treatment by cauterization and Ung. Iodoformi for seven days, and was speedily relieved by the application of the *dry poultice*, so that the patient was able to be up and about in comparative comfort.

I am aware that in epididymitis, perhaps more than in any other disease, one is apt to fall into error in estimating the value of any method of treatment, for the reason that the acute pain and sensitiveness characteristic of this condition are likely to subside at any time, and often without treatment. I therefore make no claim for the dry poultice in the relief of pain, for this and the additional reason that, in two or three cases, the pain continued for some time after its application. In regard to its usefulness in promoting the rapid absorption of the induration, often so troublesome, I can speak with more positiveness, for in every case where the dry poultice was properly applied the diminution of the swelling was clearly marked at each dressing, and I can say, without hesitation, that no method of treatment has proved in my hands so thoroughly satisfactory.

I would, therefore, urge upon the members of this Association the desirability of giving this method a trial, for the reason that it furnishes an easy method of applying heat, moisture, counter-irritation, immobility, compression and suspension—fulfilling all the indications present in acute and chronic inflammatory conditions of the testicle and epididymis.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

The Combined Action of the Koch Bacillus and Agents of Suppuration in the Evolution of Lupus Vulgaris.—Drs. Leloir and Tavernier have just made an interesting communication to the Congress for tuberculosis (Paris July, 1891), of which the following is a résumé. The microbes of suppuration are the more numerous the more rapid is the march of ulceration in lupus. When we have treated a lupus non exedens with dry tubercles by a method determining a certain amount of inflammation in the region of the nodules (cauterization raelage, application of caustics) we see at times, however in exceptional cases, certain lupus tubercles whether treated or not, become indamed, covered with crusts, taking on a flabby, fungoid aspect and ulceration. If then a destructive treatment still more energetic is instituted the ulcerative process is seen to increase. At times even the neighboring tissues, which appear entirely free from all lupus infiltration, ulcerate with rapidity and acute exacerbations, as it were, are produced. In view of the failure of usual therapeutic measures, Professor Leloir has thought to institute a local treatment solely directed toward combatting the suppurative phenomena. This has for its base the subcarbonate of iron, salicylic acid, boric acid, salol or aristol. He has in this way been able to check in twenty-four to forty-eight hours the extension of the lesions, and to cause cicatrization in a few days. He concludes from this that these ulcerations are not in relation with the pathogenic agent of lupus, but very probably with the microbes of suppuration. Indeed he has been struck by the richness of the pus from these ulcerations in staphylococci and especially in the staphylococcus aureus of which he has been able to obtain beautiful cultures. It seems then as concerning lupus that the agents of suppuration play a part more injurious than useful. Their action in this affection must then be avoided, for far from playing the rôle of *microbe gendarme*, as Professor Leloir had thought in former times, they play the part of destructive microbes ulcerating and diminishing the powers of resistance of the tissues.

Erythematoid Lupus Vulgaris.—In the May number, 1891, of the *Journal des Maladies Cutanées et Syphilitiques*, Professor Leloir takes up again the question of the relations which exist between lupus vulgaris and lupus erythematosus. First of all he maintains that it is absolutely certain that lupus vulgaris and lupus erythematosus constitute two affections essentially distinct from a clinical standpoint as well as from a histological and experi-

mental basis. It is indeed certain that there are some clinical facts which could at first sight cause the supposition that the distinction established between the lupus vulgaris and lupus erythematosus is not as clearly defined as is usually thought. To be sure lupus vulgaris when it is spread out and occupies the superficial portions of the derma can objectively simulate lupus erythematosus. These are the cases which have probably caused certain dermatologists to say that lupus erythematosus can become transformed into lupus vulgaris. Erythematoïds lupus vulgaris almost always occurs upon the face, it presents itself under the aspect of a single patch, more rarely two or three patches, usually unilateral, more rarely symmetrical, of quite a congestive bright red, disappearing partially under pressure. The surface of the plaque is as thought marbled by a sort of mesh work of a brownish or violaceous red. In the middle of the meshes small whitish or yellowish spots are to be seen. Here and there especially at the periphery it is covered with fine scales or small lamellated crusts. There can exist at times also fine vascular arborizations especially at the periphery of the patch. The latter is somewhat raised at the borders and the centre is a little depressed in consequence of the tendency to cicatrization or interstitial resorption which takes place in this part. This whole description resembles very much that of lupus erythematosus, but it frequently happens in these cases when the skin is stretched in the region of the zone of extension of the disease that small miliary nodules of a yellow color are made out. To see them it is often necessary to moisten the skin with glycerine or to cover it over with vaseline and then to wipe it off. At times it is not possible to demonstrate the existence of these pathognomonic nodules till after a certain period of evolution. On the other hand a characteristic which, so to speak, never fails is the deep infiltration on which the plaque rests, induration which can at times take a consistence nearly cartilaginous a sub-variety of this lupus vulgaris erythematoïdes where the lupomata follow the evolution and the march of lupus vulgaris sclerosus. Professor Leloir proposes to call the affection Lupus Vulgaris Sclerosus Erythematoïdes.

Erythematoïd lupus vulgaris has a very slow course, tending to extend in a centrifugal manner. Usually it is not symmetrical. It is very tenacious and very difficult to cure, but it never ulcerates. It can also be observed on mucous surfaces. Experimental inoculations and bacterial researches have proved to the author that erythematoïd lupus vulgaris is in reality a local tuberculosis.

Its pathological histology belongs at once to that of lupus vulgaris and to that of true lupus erythematosus.

I am all the more pleased to be able to make known to the readers of the JOURNAL the preceding memoir of Professor Leloir, as it is a confirmation of the present views of Dr. Vidal and of those which I myself expressed more than five years ago, here and there, in my critical reviews, and which I have during the past year clearly formulated in my book on the treatment of Diseases of the Skin. Basing my opinions on clinical data, I thought the affections hitherto grouped under the name of lupus erythematosus could be divided into two principal groups: 1. The centrifugal symmetrical erythemas, or symmetrical wandering lupus erythematosus, on the nature of which we can as yet only give hypotheses; 2. The fixed lupus erythematosus which

I have considered as being very probably varieties of cutaneous tuberculosis. Erythematoid lupus vulgaris is the form most easily recognized of these fixed erythematous lupus forms. There is here, then, the beginning of a scientific demonstration of our ideas.

Drs. Hallopeau and Jeanselme have just, on their side, published a case of true lupus erythematosus of the face, occurring coincidently with pulmonary tuberculosis, as shown by autopsy; but in our opinion this case, interesting as it is, cannot be considered as evidence of great weight in favor of the tuberculous nature of lupus erythematosus.

Case of Lichen Planus Treated by Hydrotherapy.—My excellent friend, Dr. Jacquet, has communicated to the Society of Dermatology and Syphilography a very interesting case of lichen planus in a woman 36 years of age, who, after all sorts of annoyances, became affected with a typical eruption of lichen planus upon the trunk and limbs. In spite of the use of glycerole of tartaric acid, of baths and of Fowler's solution, the disease continued to spread and to become more severe, when Dr. Jacquet conceived the idea of advising hydrotherapy in form of tepid douches at 35°, followed by a short cold affusion. In a very few days the irritation of the nervous system, which had been extreme, became calmed down, sleep and appetite returned and pruritus ceased. The eruption began to diminish toward the end of the third week, and after a slight recurrence, disappeared completely after six weeks of the douche. From the time those were begun the patient ceased all other forms of treatment. The author profits by this remarkable instance to place in relief the close relations which exist between the modifications of the nervous system and lichen planus, relations incontestable, although the connection between the cerebro-spinal system and the cutaneous lesion is still unknown. I would remark, in this connection, that, after several other dermatologists, I have expressly recommended the use of hydrotherapy and sedative of the nervous system in very impressionable persons affected with lichen planus. It is in the same order of ideas that such frequent use is now made of antipyrin in pruriginous dermatoses.

Excision of the Syphilitic Chancre.—The utility of excision of the syphilitic chancre has quite recently been the subject of several discussions in the Society of Dermatology and Syphilography of Paris. Dr. Mauriac excised a chancre on the third day of its appearance while there was still no adenopathy present. The following day a new chancre and one more indurated than the original, developed at some distance beneath the prepuce. This was also cut out and the two wounds cicatrized rapidly, but beneath them a specific induration occurred and inguinal adenopathy became more and more pronounced. At the end of fifty-three days nocturnal headaches came on, intercostal rheumatoid and diaphragmatic pains occurred with evening elevation of temperature, then an eruption of flat syphilitic papules of moderate intensity. The general infection was thus neither prevented nor retarded by the operation.

Dr. Barthelémy does not believe in the utility of excision of the syphilitic chancre, for where it is practiced the lymphatic channels have already become infected, when after excision of a chancre surely syphilitic, no syphilitic manifestation appears it is not sure that it is the result of the operation, for we all know of instances of syphilis in which secondary accidents have

been wholly wanting although there has been a general infection of the economy, since retarded tertiary syphilitic manifestations developed later.

Dr. Humbert has excised twelve syphilitic chancres; eleven of these patients have had secondary manifestations and a single one remained free, and for two years and a half the indemnity has persisted. The diagnosis in this instance was beyond question. In spite of this isolated success he does not believe in the efficacy of the abortive method for the following reasons: "We do not know either at what moment nor under what conditions we should excise the chancre. Without doubt we should as much as possible excise early, but it is abundantly proven that the most hasty operation does not prevent infection. On the other hand, alongside of these examples of immediate eradication followed by accidents after a brief delay, there are cited cases of success obtained after fifteen or twenty days, even after the appearance of the chancre." "There are in these facts inexplicable contradictions unless we admit that general infection follows no fixed rule, that it takes place at its own free will, that the virus can at one time spread immediately through the organism and at another remain imprisoned at the site of the chancre, and that during a period which varies from a few hours to three weeks." In the second place it is recommended to operate before the development of adenopathy, but there are a certain number of successes attributed to excision in which the patients have been operated after they already had their glands manifestly affected. "Nothing then either in the age of the chancre or in the degree of adenopathy can make us predict a failure or a good result." However theoretically advantageous, this operation cannot be supported. Practically, the facts scarcely call for its recommendation. "It is not to be denied that in the great majority of cases excision fails; and this number of unsuccessful attempts is incomprehensible if we admit that the chancre is in reality the first accident of syphilis and purely local." Among patients who have not been operated there are instances of syphilis absolutely without sequelæ of which the author cites examples; if they had been subjected to operation they would be regarded as evidence of success of excision.

Dr. Humbert goes on to remark how illusive and little logical it is to say in regard to a syphilitic from whom the chancre has been removed and in whom the secondary accidents have been benign that the excision has been beneficial. How can one know if the syphilis has been attenuated? We will not insist on the question, for the arguments of the author are truly too luminous. Dr. Humbert believes, however, that there are cases in which the syphilitic chancre should be excised when the operation can bring about a cure of the chancre in a few hours, substituting for it a non-virulent wound situated in a region where the excision can leave no trace, such as upon the prepuce for example. We must reject this operation on the other hand when we have to do with a chancre of the glands, of the groove, localities where the excision becomes a delicate, painful operation and one which may leave deep cicatrices.

Dr. Jullien on the contrary is a convinced partisan to the utility of excision of the chancre. He attacks the objection which consists in saying that when the excision is made early before the chancre has become perfectly typical, and before the development of the inguinal pleiad we can not be sure of the diagnosis of syphilitic chancre. We can not, however, he adds, wait for

operation until the diagnosis is completely confirmed by decided glandular involvement for in this case we could not operate, and when we are fortunate enough to jugulate the infection we remove all criterion of demonstration.

These reflections are very just and we can only conclude that it is absolutely impossible to demonstrate in a scientific manner the value of the method of excision of the chancre.

As Dr. Barthelémy remarked in the course of the preceding discussion the only argument of value that those favoring excision can employ is that the infection is perhaps not yet in all the cases at the time the chancre makes its appearance. At times indeed positive inoculations have been made upon the subject himself with the fluid taken from a syphilitic chancre, but there are exceptional cases of great rarity and of which we should perhaps not exaggerate the importance. Syphilis belongs indeed to that class of affections in which after inoculation all seems in a manner to lie dormant for a certain time in the organism. The wound of inoculation heals; there is in fact what is called a period of incubation. Do we believe that in reality all remains silent and in repose in the economy during this period? A study of that which takes place in hydrophobia and in vaccination proves the contrary. The period of incubation in these affections is truly the period which separates the moment of introduction of the virus from the moment when the symptoms of the disease itself begin to be produced; it is in reality the period of infection of the organism, a period which varies according to the qualities of resistance of the territory, according to the power of the diffusion and the toxicidity of the virus or the penetration of the microbes. In what degree is the economy infected when the chancre appears. Is it infected in all its constituent parts? Is there not a part of the organism, the integument for example, so little impregnated as to furnish a territory favorable to an inoculation? Here are questions surrounded by the greatest obscurity which one is permitted to ask. In any event those who favor excision have themselves demonstrated by their repeated failures that in the great majority of cases as soon as the chancre appears the infection of the economy has already taken place. That is the rule. There are, however, exceptions to it. It is not yet possible to demonstrate it scientifically. This is the succinct but true exposé of the question. For us there exists but one legitimate and logical excision of the syphilitic chancre; the one which could be made immediately after the infecting coitus just as we cauterize with a red hot iron the bite of a mad animal. We would then have to do with a lesion probably still local if we intervened quickly enough; this brings us back practically to the common precept "after a suspected coitus wash with an alcoholic solution of bichloride of mercury and cauterize vigorously your excoriations if you have any."

PARIS, Sept. 21st, 1891.

L. BROcq.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

210TH REGULAR MEETING.

DR. GEORGE H. FOX, *President, in the Chair.*

A Bit of Personal Experience of the Value of Arsenic.—DR. L. DUNCAN BULKLEY read a paper with this title. See page 452, 1891.

DR. PIFFARD had regarded such eruptions as described as eczemas; he had treated them with arsenic, and in some had obtained as good results as had Dr. Bulkley. For several years he had treated vesicular diseases with arsenic, and had called attention to such use of the drug in the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

DR. BULKLEY asked regarding the frequency of the doses employed.

DR. PIFFARD replied that he gave the drug three or four times a day; he gave it on an empty stomach when he desired its full effect.

DR. MORROW asked if the writer of the paper had been exposed to poison oak?

DR. BULKLEY answered, No.

DR. MORROW further asked if Dr. Bulkley had noticed any effect on the kidneys from the use of frequently repeated doses?

DR. BULKLEY had noticed no such effect.

DR. MORROW had seen cases of acute eczema made worse by the use of arsenic given in much smaller doses than those indicated by Dr. Bulkley. He thought it very probable, however, as Dr. Piffard had suggested, that where the disease is vesicular, irrespective of its cause, arsenic may exercise a favorable influence. He had never pushed arsenic in the way indicated by Dr. Bulkley.

DR. KLOTZ thought the case described by the writer a typical case of nervous eczema. He had obtained relief from the itching in such cases by opening the vesicles.

DR. ELLIOT had had the same eruption, as described by Dr. Bulkley, a number of times, which recovered equally well with or without treatment. He had always considered it an eczema, but had never used arsenic for its relief.

DR. BRONSON thought this case would certainly be called an eczema, but considered it totally different from the typical eczemas in which there was impairment in the growth of the epidermis, and in which little or no tendency to spontaneous healing existed.

The most essential characteristic of the typical chronic eczema was that it showed little or no tendency to get well of itself. In the one case atrophy of the trophic nerves was present, while in the case described by Dr. Bulkley there was probably an irritation of these nerves.

DR. MORROW asked Dr. Bronson if he was not claiming too much when he said that eczema showed no tendency to spontaneous healing?

DR. BRONSON replied that one should differentiate between the various forms of eczema. The form resulting from parasitism and from constitutional causes were entirely different.

DR. MORROW said that all recognized that the ezeemas of occupation and those from drugs showed a tendency to spontaneous cure when the exciting causes were withdrawn.

DR. SHERWELL considered the case described by Dr. Bulkley one of dysidrosis. He had used arsenic with good results in these cases.

DR. MORROW added that he had treated such recurring vesicular ezeemas of the fingers with external applications of strong tincture of iodine, and had seen very beneficial results within twenty-four hours. In view of the fact that arsenic was not a safe drug to give in such frequently repeated doses, he would much prefer the application of tincture of iodine.

DR. FOX thought the therapeutic point brought forward by Dr. Bulkley was of interest, but he had seen arsenic fail in so many cases of skin disease that he was sceptical regarding it. He considered it of use in superficial and subacute diseases of the skin, but could not agree with Dr. Piffard that it was useful in all cases of vesicular disease.

DR. BULKLEY said that it was a question of diagnosis whether these cases should be called ezeema or not. He desired to emphasize the fact that the intense itching was controlled by arsenic given in doses of three to eight drops every two hours. When a neurotic element was present, he had never seen it do harm.

DR. MORROW asked if Dr. Bulkley affirmed that in neurotic conditions one could take with perfect impunity doses of arsenic that would prove deleterious in ordinary conditions of the system?

DR. BULKLEY replied that such was his opinion.

DR. MORROW had never subscribed to the view that the existence of a disease modified the susceptibility to remedies.

DR. PIFFARD said it was a general principle that where a drug exerts its specific action in the control of a certain condition, the drug must be given in larger doses than would be necessary to simply produce its physiological effect. A portion of the drug given is used up in combatting the disease, while the surplus is used in producing the physiological action of the drug. He cited the use of mercury in syphilis in illustration of this opinion.

Impetigo Contagiosa.—DR. ALLEN presented a little girl of five years, who had been sent to him by Dr. O'Neil with eruptive lesions over the whole body. Patient was vaccinated in May last. Before the vaccination had healed "white water blisters" began to form upon the arm and shoulder. These soon spread to the face and other regions. Though under treatment much of the time since, patient has never been entirely free from the disease. There are now bullæ with clear contents upon the thighs, genital region, legs and arms, and patches of confluent ruptured bullæ upon reddened areas above the wrists and ankles. The front of the trunk and upper portions of arms and legs are covered with brownish pigmented spots. The site of previous lesions, about the mouth and chin are characteristic lesions covered with friable "stuck on" crusts. The peculiarities of the case are its long duration in spite of treatment; the extent of surface implicated and the fact that the patient has passed through scarlatina since the disease began without any curative effect of the latter disease upon the impetigo, an effect which has been decided in at least one instance in the speaker's experience.

DR. BULKLEY had had a case at the Skin and Cancer Hospital, which showed the eruption in the same localities. The eruption had lasted several months and followed immediately upon vaccination. The use of arsenic in large doses at first seemed to do good, but it soon lost all influence over the eruption.

DR. JACKSON said that the case presented certain features resembling contagious impetigo, but its long duration was unusual. He did not think, that, as a rule, this disease was associated with pediculosis capitis. He thought it probable that Dr. Allen's case would be described by the German writers under the designation of contagious pemphigus.

DR. LUSTGARTEN referred to an epidemic of contagious impetigo following vaccination, on the Island of Rügen, which had been investigated by two German physicians, Pogge, Eichstedt. One of them had isolated a specific coccus and produced the disease by inoculation. He had himself an opportunity of examining similar cases of a milder form. In one of these cases, he thought he had found a specific coccus, which produced a vesiculation, attended by slight itching. Clinically, however, the eruption was not identical with impetigo contagiosa. Relapsing impetigo contagiosa is very frequently associated with pediculosis capitis and it would be well, he thought, in this case to treat the pediculosis, as he had observed the presence of nits upon the hairs.

DR. ELLIOT had seen the same case, in consultation, some months before when it presented an entirely different appearance. Then, the eruption consisted of rings, circles and gyrate lines composed of bullous lesions of all sizes. He had diagnosed impetigo contagiosa. He had had a precisely similar case under his care during the previous winter in which all internal treatment had been without influence but careful antiseptic applications over the entire body and retained in position with bandages, had caused it to disappear.

DR. KLOTZ thought the bullae were remarkably tense and elevated, generally in impetigo contagiosa they were more flaccid and dried very quickly. The possibility of a pemphigoid eruption suggested itself to him.

DR. MORROW thought there was less crusting and scaling than in contagious impetigo. He thought the clinical history and appearance of the lesions corresponded closely with the class of cases described by Hutchinson under the designation of varicella prurigo.

DR. PIFFARD did not think the case presented by Dr. Allen the disease described by Tilbury Fox, under the name of impetigo contagiosa. He would prefer to call it an example of dermatitis multiformis. He thought it rather the result of internal than external causes.

DR. CYTLER thought there was undoubtedly an impetigo contagiosa present, but in addition to that eruption the presence of large bullae without a surrounding areola of redness, led him to the opinion that the patient had also an acute pemphigus.

DR. FOX referred to an epidemic of contagious impetigo which he had observed some years ago, at the Nursery and Child's Hospital. A number of children suffered with typical lesions of the disease, while some more delicate infants presented large bullae upon the neck and body. He did not think internal remedies had any influence over the eruption.

DR. ALLEN was not disposed to attach much importance to the presence

of the pediculi from the clinical history of the case. The back was comparatively free from lesions while the entire front of the chest and abdomen had been covered with them. He thought the disease was carried from one part of the body to another by the finger nails.

Prurigo.—Presented by Dr. CUTLER.

Willie L., Aet. 11 years, born in the United States. Mother born in this country but the father is a native of Germany. No history of skin disease in either parents or grandparents. The patient gave no evidences of any skin disease with the exception of occasional attacks of "boils" until he was six years of age when his mother first noticed that he was very restless at night and scratched the skin a good deal. No eruption was noticed at that time although the skin seemed unnaturally rough and dry to the touch. This itching of the skin, especially at night, and in cold weather, has been a constant symptom, but not until the boy was 8 years old was any eruption noticed. These lesions the mother describes as small red and white pimples which first made their appearance on the lower extremities below the knees, and gradually extended up the thighs. The upper extremities and trunk were subsequently attacked. The eruption has been worse in winter. Itching has been intense. On inspection the patient is seen to be small, pale, and anemic. The eruption consists of split-pea and pin-head sized papules in and beneath the skin. The lesions are firm, discrete, and of a white and pale red color. They are especially numerous on the extensor surfaces of the extremities and buttocks but also scattered over the trunk. Few lesions present themselves on the hands, feet or face, and none are found on the soles or palms. Some of the papules are covered with blood crusts and about the ankles and wrists are a number of discrete vesico-pustules. The skin is thickened, roughened and pigmented especially when the papules are the thickest, and presents numerous blood cuts and scratch marks. The lymphatic glands are enlarged, especially so in the inguinal region. The boy is seen to scratch the skin almost continuously but seemingly without much relief.

DR. LUSTGARTEN said there was no doubt regarding the correctness of the diagnosis. He had seen six cases since coming to this country two years ago. Four of them were born in Europe and two of foreign parents. Four were Jews and two were Christians. He had never seen a case in the Anglo-Saxon race. It seemed to be more frequent in Eastern Europe, especially among the Jewish race. In Warsaw, he had been informed, that 300 cases of prurigo had been found among a total of 13,000 cases of skin disease. This was a much larger percentage than is found in Vienna.

DR. CUTLER said his patient was born in this country. The father was a German, the mother was born in America. This was the second case he had seen in the last three weeks.

Ulerythema Sycosiforme.—Presented by DR. ELLIOT.

Patient, male, age 45. Trouble began seven years ago on bearded surface of cheek as an erythematous patch, which became the seat of atrophy. New patches appeared here and there over the under surface of chin and on cheeks, following the same course. At present there are extensive portions showing marked atrophy and cicatrization in a diffuse form, on which the hair has been entirely destroyed. In the periphery are numerous papular

lesions situated around the hair follicle, a few crusts covering shallow ulcerative spots. The papules and ulcerations have only developed in the last four years. The course of the individual patches has been one of peripheral extension.

DR. CUTLER had treated a similar case by painting the diseased patch with a solution of pure carbolic acid and tincture of iodine with chloral followed by Lassar's paste. This application was made several times with a good result.

DR. BULKLEY did not think the disease could be cured unless the beard was shaved nearly every day. In ordinary sycosis, almost as much scarring was often found.

DR. BROXSON thought the eruption corresponded very closely with the folliculitis decalvans, the second variety described by Brocq. He thought it parasitic in origin.

DR. LUSTGARTEN would advise it to be treated by shaving, epilating, scarifications, the application of antiseptic and mercurial plasters.

DR. KLOTZ did not think the scar tissue like that seen in sycosis.

DR. MORROW protested against the use of the name *ulerythema sycosiforme* in this connection.

DR. FOX preferred the old term, sycosis. The presence of cicatricial tissue and absence of loosened hairs would not lead him to regard it as another affection. He would advise frequent shaving, epilation and alternately stimulating and soothing applications.

DR. ELLIOT could not agree with the opinion advanced that this case was a sycosis. This latter disease was primarily and essentially characterized by the formation of a papule or pustule around the hair follicle, and did not begin as in the case under consideration by an erythematous patch which went on to atrophy and followed a course of gradual more or less serpigenous extension. There were papules and pustules present, but they had only developed later within a few years and not synchronously with the primary phenomena. Under the microscope there was found a perifollicular infiltration of the corium and also quite extensive inflammatory changes throughout the derma. The hairs were absent or atrophied. He would also call attention to the rebelliousness of the case to treatment, which had been carried on for several years and yet had proved of little value. In this it also agreed with those seen and described Dr. Unna, and when the entire history and features of the case were taken into consideration, he thought it agreed more closely with the *Ulerythema sycosiforme* than with any other disease known to him.

Chloasma.—Presented by DR. CUTLER.

Mary G., age 54, native of Germany. Dates the beginning of her skin trouble from the time of her voyage to this country two years ago. Before that time her skin was fair, but during the time she was on the ocean the skin began to turn brown in patches about the face. She attributed this to sunburn and the action of the salt air, but after landing in this country the brown discoloration instead of getting better grew larger in area and deeper in color, extending down on the neck and chest by increase of size of the former patches and the production of new ones. On inspection the face and neck of the girl is of a dark olive green color almost cyanotic in appearance, while on her chest are sev-

eral irregular patches of the same color. Her discoloration does not extend below the nipples. Her general health is good.

Dermatitis Herpetiformis.—Presented by DR. ELLIOT.

Patient, male, age 30, was sent to him through the kindness of Dr. McGowan. Etiologically alcohol abuse was a prominent feature. General health was, however, good. The eruption began six months ago and in the form of grouped vesicles and papules had relapsed in a continuous manner. The lesions had appeared generally over the body and their involution left pigmentation. Pruritus intense.

Acne Varioliformis of the Extremities.—Presented by DR. BRONSON.

The case was the one presented by Dr. Bronson about one year ago and reported in the April 1891 Number of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES. The eruption after remaining cured for several months now showed a relapse in a milder form.

Lupus Erythematosus.—Presented by DR. BRONSON.

M. R., Aet., 12. Three years ago the patient first noticed the disease beginning as small red spots not larger than pin heads about the inner lids of the eyes and upon the left cheek. The spots have never disappeared but have steadily increased up to their present size. At present there are two large patches near the inner canthi of the eyes and one small one near the outer canthus on the right side. The patches are red showing decided atrophy of the skin with widely dilated follicles in the centre and elevated red erythematous borders.

The patch near the inner angle of the right eye extends from a point about half an inch above the inner canthus to a little below the lower eyelid along which it extends for a quarter of an inch. On the left side the patch begins just above the inner canthus and extends down the cheek to a point half an inch below the zygomatic angle. Near the outer canthus of the right eye is a small patch about a half inch in diameter. At present under carbolic acid treatment, the patches have been much improved and further progress apparently arrested.

Selections.

Lysol. GERLACH. (*Zeitschrift für Hygiene*, 1891, Bd. X.)

The author, after a bacteriological examination of the disinfecting power of watery solutions of lysol, has arrived at the following conclusions :

1. Lysol is more effective than carbolic acid and creoline, not only in pure cultivations of bacteria, but also in mixtures of bacteria.
2. The hands are disinfected by means of a 1 per cent. solution of lysol without the use of soap.
3. It is far more efficacious in its power to disinfect the stools and sputa than all other disinfectants.
4. The walls of operating or other rooms may be made free from bacteria by spraying them with a 3 per cent. solution of lysol.
5. It is much less poisonous than carbolic acid, creoline or sublimate. Its price is little.

Tabes and Syphilis. PROFESSOR ERB (*Berliner Klin. Wochenschrift*, Nos. 29, 30).

The writer has tabulated 300 cases of tabes, and the results show that syphilis is an element in no less than 249 instances, while other causes, such as neuropathic tendencies, cold, fatigue, sexual excesses, trauma and suspected syphilis, gave but thirty-two cases. Nineteen had to be thrown out because sufficiently definite statements as to cause could not be obtained. Of the cases in which syphilis played a part seventy-seven, or 27 per cent., gave a history of syphilis or of chancre alone, without other cause. The juxtaposition of the noxae which preceded the development of the tabes in the other instances showed for syphilis, plus cold, 32 cases; plus fatigue, 17; plus sexual excesses, 27; plus trauma, 5; plus neuropathic tendencies, 31; plus cold and fatigue, 39; plus cold and excesses, 5; plus fatigue and excesses, 2; plus three or more other noxae, 11; plus trauma, cold or excesses, 3. In 1883 Professor Erb claimed that syphilis is undoubtedly the most frequent etiological element in the production of tabes. Other causes seldom of themselves alone occasion it, but, acting in conjunction with syphilis, they are of importance.

CHARLES W. ALLEN.

Inoculation for Syphilis. DR. FELKIN (*Med. Press*, August 19, 1891).

The writer in the course of a discussion on the prevention of epidemic disease, says that in years gone by the natives of the White Nile Provinces were ravaged by syphilis, the disease having been imparted by Arab traders. For some years past the tribes have made determined efforts to stamp out the disease, and this, we are told, they have almost succeeded in doing by enforcing inoculation previous to marriage. Young people marrying without having undergone this precaution are put to death. It is not stated whether the inoculation or the execution of those refusing it has been the more potent prophylactic procedure.

CHARLES W. ALLEN.

Syphilitic Phlebitis. DR. CHARROT (*Revue de Chirurgie*, No. 7, 1891).

The writer reports two cases of this rather rare condition. In one, the phlebitis came on a year after the chancre and coincidently with an orchitis. In the second case, syphilis had existed for several months. The pathological anatomy of this condition has scarcely received any attention, and as there is no characteristic symptomatology, the diagnosis must rest in a great measure on the clinical history. The evolution is said to be less acute than in rheumatic phlebitis, and the gouty form is readily recognized by its extreme mobility, its rapid invasion, and by the tenacity of the edema, which at times assumes considerable proportions. In the syphilitic form specific treatment is of great value.

CHARLES W. ALLEN.

Urethritis of Malarial Origin. F. MOSCATO. (*Revista Especial de oftalmología, Dermatología, Sifiliografía y Afecciones Urinarias*, No. 7, 1891.)

The writer in an interesting study of the localizations of malaria cites the peculiar case of a man, seventy years of age, in which, during the course of an attack of malarial fever, there developed without any appreciable cause, urethritis with pain on micturition. It disappeared as soon as the fever terminated.

F. H. PRITCHARD.

The Diplococcus of Neisser in Periurethral Gonorrhœal Abscesses. C.

PELLIZZARI. (*Revista Especial de Oftalmología, Dermatología, Sifiliografía y Afecciones Urtuarias*, No. 7, 1890.)

Many of the complications of gonorrhœa have been attributed to a mixed infection, as for example the periurethral abscesses have been thought due to the staphylococcus pyogenes aureus which is also found in their contents together with the diplococcus of Neisser. Pellizzari, in three cases of periurethral abscess, has gathered the pus with the necessary precautions, examined it by Gram's method and made cultures upon various culture-media. In two cases he has found no microbe colorable by this method and the cultures made remained sterile, while with the other methods of coloration the gonococcus could be seen in the interior of the cells and recognized by its well-known characters. In a third case, there was discovered, besides the gonococcus a coccus, scanty in number, large in size, which seemed to be neither a streptococcus nor staphylococcus. He concludes from his investigations that the gonococcus possesses pyogenic properties and is able alone to produce periurethral abscesses. It is probable, that when the staphylococcus pyogenes aureus is found in these abscesses, it has developed secondarily in the pus of the gonorrhœic abscesses, in which it easily survives. Hence periurethral abscesses should be opened immediately with all anti-septic precautions in order to avoid infection, which is liable to follow, by the staphylococcus, and which produces abscesses of much greater gravity.

F. H. PRITCHARD.

The Presence of Gonococci in Chronic Urethral Discharges PROF. FREDERICK GOLL, of Zurich. (*International. Centralb. für die Physiolog. und Path. die Harn und Sexual-Organen.*)

The writer calls attention to the frequent discovery of gonococci in the scanty discharges and *tripper-faden* of chronic urethritis; and explains in that way the large and constantly increasing number of reported cases of infection taking place long after the apparent cessation of all signs of active inflammation. He emphasizes the warning already sounded by Bunum, regarding the uncertainty of an opinion based upon the result of a single examination, and advises, especially when the question of marriage is involved, several observations after regular intervals, before arriving at a definite opinion.

The date from which he drew his conclusions, were derived from careful microscopic examination of the secretions in 1046 cases of chronic urethritis. In many doubtful cases as many as ten or fifteen examinations were made before the result was recorded.

From the table which he gives, recording the results of his investigations, it is seen that 85 cases were examined one month from the date of infection—of these 40 still furnished a discharge which contained gonococci; 75 were examined two months after infection—gonococci found in 15; 62 examined four months after infection showed 13 containing gonococci; the number of cases examined seven, eight and nine months after infection was 108, of which 28 were found to be capable of transmitting the disease; 12 cases out of 83 examined one year from infection, contained gonococci; 7 out of 135 at the end of two years; 2 out of 80 at the expiration of three years.

Of the 79 cases examined, the duration of which was more than three years, in none were gonococci found.

The author speaks of one, especially obstinate case where repeated examinations were made always with negative result. In this instance irrigation of the bulbous portion of the urethra furnished a few small epithelial scales, which, when examined microscopically showed large numbers of gonococci, not grouped as usual arounds the nucleus of the cell, but in the cement substance between the flat epithelial cells.

G. E. BREWER.

The Urethrameter; its Importance in the Diagnosis of Chronic Urethritis and Beginning Stricture. E. FINGER. (*Internat. Klin. Rundschau* 1890, No. 53.)

The writer enters a strong plea for the more general use of the urethrameter of Otis.

He defines a stricture as "a localized diminution in the normal dilatibility of the urethral canal, occasioned by pathological changes in its walls." These changes begin by an extension of the inflammatory process below the epithelial surface of the canal, to the sub-mucous cellular tissue; and consist first, in a round cell infiltration, which, if allowed to remain, eventually organizes and contracts, giving rise to distinct indurated bands.

The urethrameter is of value in appreciating the earliest of these changes as well as in the later stages of the disease. Its early use therefore will often furnish indications for treatment, which if acted upon at once, not only greatly shorten the duration of the symptoms, but frequently remove the future necessity for serious surgical interference.

G. E. BREWER.

The Role of the Compressor Urethrae Muscle in the Prevention of Posterior Urethritis. E. FINGER. (*Internat. Centralblatt für die Phys. und Path. die Harn und Sex. Org.*, August 1891.)

This author strongly combats the view, usually accepted, that to the mechanical action of the compressor muscle must be ascribed the chief cause in preventing the backward extension of a gonorrhoeal urethritis. Anatomical investigation has shown that the urethral mucous membrane, in different localities, exhibits marked variations, regarding its vascular supply and the number of lacunae and follicles present. These minute glands with their accompanying rich capillary network, are most numerous in the pendulous portion,—at the bulb, and in the prostatic region. In the membranous urethral on the other hand, and in and about the internal urethral orifice, the mucous membrane is decidedly less vascular, and almost devoid of glands.

As each minute gland, with its surrounding capillaries furnishes a miniature incubator for the development of gonococci, it can easily be appreciated why the disease is more active and chronic in the locations where these conditions are present, and why it often limits itself to that portion of the canal anterior to the bulbo-membraneous junction.

G. E. BREWER.

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CORRECTION.

On page 467 of the December issue of this JOURNAL, Dr. Alexander is reported as saying that he had seen a case in consultation with Dr. Loomis. The report should read with Dr. Janeway.

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Original Communications.

ON THE USE OF SALICYLIC ACID IN THE TREATMENT OF CERTAIN FORMS OF CYSTITIS.

BY

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FOR the past four years I have been accustomed to make use of a two per cent. solution of salicylic acid in glycerine as an application to venereal ulcers about the genitals in patients who were being kept under observation. A small square of lint soaked in this solution and applied to an ulcer in the case of patients who are not over-clean in their persons, especially such as come to the college clinic, keeps the lesion admirably clean and free of the exudate which is commonly over it. It is used on chancres, chancroids and herpetic eruptions alike. About three years ago a student by mistake mixed one ounce of this solution with five of water (making a one-twelfth per cent. solution), for the purpose of washing out the bladder of a patient with chronic exudative cystitis and who had previously had his bladder irrigated with the standard borax solution in glycerine and water without material benefit. Throwing in, according to directions, through a soft catheter, one ounce of the salicylic acid solution, he observed that the returning fluid was much more milky in appearance than the urine previously drawn off. A second ounce was thrown in and returned milky in color also before the mistake was discovered, when becoming alarmed, the bladder was washed out with simple water and the catheter withdrawn. The patient returned the next afternoon to report that he was much better—the call to urinate less

frequent and less painful--and to ask that a second similar injection be given, which was done. From this time a salicylic acid solution has been in common use at the genito-urinary clinic of the St. Louis college in similar cases.

Soon after the use of the electro-cystoscope, it became apparent to me that one could occasionally irrigate the bladder two or three times with simple distilled water until the fluid returned clear enough for inspection; after which, upon introduction of the instrument, it was clear that the thick, tough mucus had not been washed from the wall of the bladder, it being plainly visible spread over the surface or hanging in festoons, while the distending fluid remained sufficiently clear for inspection. It was observed in a number of cases, that the bladder walls were not sufficiently uncovered to permit one to ascertain their condition. At first, I used a solution of sodium bi-carbonate for the purpose of washing this mucopurulent secretion off the vesical wall with only partial success. Finally, in one case, I removed the cystoscope in order to wash out the bladder with a one-sixteenth per cent. of salicylic acid. The fluid, which had previously returned clear, now returned milky, full of shreds. Clearing the bladder again with simple distilled water, the cystoscope revealed a clean bladder wall. This experiment has led to the extensive use of salicylic acid solutions, or a combination of salicylic and boric acid (as in the Tiersch solution), in the treatment of cases of cystitis either alone or where it was necessary to cleanse the mucous membrane of adherent mucus and muco-pus in order to more correctly apply other remedies, such as a nitrate of silver or thallin solutions. The excellent results obtained by first cleansing off the mucous surface with the salicylic acid solution before applying the remedies intended, either as bactericides, astringents, or to modify cell action, has confirmed me in the belief, that in many cases failure has been brought about in large measure by the fact, that in the ordinary way, the remedies do not reach the epithelial surface at all, unless this precaution is taken, they are covered with a coating sufficiently thick to protect them alike, both from irritating, often ammoniacal urine, and the medicated fluid. Especially is this the case when the nitrate of silver solutions are used; for a very thin coating of muco-pus is sufficient to modify the nitrate of silver solutions in ordinary strength so as to render it inert, either as an albuminate or as a chloride.

Some surgeons attempt to remove this tenacious coating by

the mechanical action of the injected stream—a method, which the use of the cystoscope (which has been of great service to me in studying these cases), has demonstrated to my satisfaction to be an impossibility. Moreover, in a case of cystitis, one does not like to make use of even so much as a forcible stream, lest damage may result.

The great majority of cases of cystitis are by extention,—a urethritis extending backwards sets up an acute or chronic inflammation. Thus the disease is primarily a cystitis mucosa. A pathogenic agent, mycotic or chemical, acting upon the epithelial cells, determines not only an increased secretory activity, but also an active cell proliferation; so that among the first effects, are a piling up of epithelium and a coating of the surface with mucus. Leaving out the question of increased vesical sensitiveness, so variable in cases otherwise apparently similar, we observe that one of the first effects of inflammation of the vesical mucons membrane is, to render itself to a greater or less extent inaccessible to topical applications, so that for the longest time it has been the custom of surgeons to precede all such applications by irrigation. When the exudation is thin and made up chiefly of free pus, the solutions of borax, boracic acid, chloride of sodium, etc., adequately effect the purpose, but the more chronic the inflammation becomes, the deeper it sinks; and the more it determines cell proliferation and mucus secretion, the more useful becomes, as a cleansing agent, the salicylic acid solutions.

It is therefore, in the more chronic cases, where the surface is covered with a thick, or a tenacious protection, made up of mucus and necrotic epithelium, that irrigation with the salicylic acid solution serves the best purpose. The addition of boric acid, as in the Tiersch solution, is, in my experience, of no service. It is the salicylic acid, whose well-known power of dissolving epithelium, or epithelial cells, or what amounts to the same thing, loosening them up by dissolving the intermediate cement substance, here becomes a powerful agent in securing a proper condition for the application of other remedies. It therefore goes without the saying, that salicylic acid is not of equal service in all cases of cystitis, and that it is distinctly contra-indicated in some. In acute cystitis with thin exudation, it is not necessary. Where there is ulceration, with a disposition to bleed, it is harmful. In tubercular disease where the bacilli and their ptomaines are already breaking down the tissues without giving opportunity for other covering to an

ulcer than that afforded by coagulation necrosis, the salicylic acid is not only not needed, but it is distinctly harmful.

Its use in old prostatitis with sacculated bladders into which numerous trabeculae project, is open to two serious objections: First, for the cleansing of the pockets of the tenacious mucus it is inefficient; and second, the projecting edges of the trabeculae are unequally exposed to its action, so that frequent irrigations will so clear them of their protective coating, and will in addition so soften and loosen their epithelial coverings that they are apt to bleed. In proportion to the tendency to hemorrhage, in no case is the use of salicylic acid solutions contraindicated. As is well known, some dilated, sacculated bladders, in the case of prostatic disease, are not capable of being emptied even with the catheter. Some fluid will always remain behind. In such cases, great care is necessary in washing out lest some of the acid remaining for a length of time in contact with exposed surfaces may, to too great an extent, dissolve off the epithelial coat. With these precautions it may be used with advantage in the bladder as follows: In acute or chronic cases of exfoliative cystitis where the cystoscope reveals the condition above described, three, four or five washings of one-sixteenth to one-tenth per cent. of salicylic acid in glycerine and water may be made for the purpose of clearing off the mucous membrane. One or two washings, or one or two introductions of an ounce or so of water should be then made for the purpose of clearing the bladder of the acid. The viscus, being then entirely empty, fifteen to thirty minims of a one or two per cent. silver solution may then be thrown into it by an Urtzmann's or a Guyon syringe. This may ordinarily be permitted to remain in the bladder, and does not cause much, in some cases, no pain.

The urine trickling down soon changes the nitrate into chloride, and besides a little burning and frequency of urination, lasting for an hour or two, there are no disagreeable symptoms. Used in this way, the silver solution becomes directly into contact with the cells whose action it is intended to modify. The full antiseptic astringent, or cell modifying influence, is thus obtained, and the mucous membrane is covered with a thin film of the albuminate of silver, instead of a thick, tenacious and septic mucus-purulent lining. If much pain, burning or ardor-urinae result from the injection of the silver solution it can be easily overcome, and the silver solution chemically modified at the same time, by throwing into the

bladder cavity ten or fifteen minims of a ten per cent. solution of cocaine. In my own work, I never previously cocainize a mucous membrane, for the simple reason that it cannot be washed off so thoroughly as to prevent its acting instantly upon the silver solution to change it into the inert chloride. In this way very much weaker solutions of nitrate of silver than those formerly in vogue may be used effectually in the treatment of chronic persistent cystitis. The strength of the salicylic acid solution is to be varied in proportion to the thickness, consistency and tenacity of the muco-purulent covering, the object being to clear this off in order that the medicated solutions may come directly in contact with the surface of the fixed epithelial cells. In those cases where the proliferated epithelium tends to assume the shape of a horny layer, the full strength of two per cent. salicylic acid in glycerine,—a saturated solution in glycerine might be used; being allowed to remain in the bladder a few minutes, to be subsequently washed out with simple distilled water. In such a case it would be obviously preferable to withdraw so strong a solution through a catheter in order that it should not come in contact with the urethral mucous membrane. Though salicylic acid is itself an antiseptic with certain bactericidal powers, it has served me best rather as a cleansing agent—one with which to prepare the mucous membrane—than as a curative remedy. Of late, I have used with most satisfactory results, and with much less pain, than is the case with silver solutions, thallin sulphate, whose effects it seems extended below the mucous surface further than the silver. Whatever remedy is made use of in the shape of a local application, the object in view, is either to destroy the bacteria, to neutralize or render inert their ptomaines, to protect against the influence of a chemical irritant, or to so modify cell action as to overcome their pathogenic effect.

This clinical experience is presented with the intention of bringing before you the advantages which the use of salicylic acid affords; not alone as a remedial agency, but as, as has already been said, an assistant to the more thorough and adequate application of other more powerful and more efficient topical remedies; for, in order to attain the full effect of such local application, it is indispensable that they be brought directly in contact with the cells just as the pathogenic factor is in direct contact—a thing as impossible in the bladder as it is on the nasal or pharyngeal mucous membrane, unless the inflammatory product is first removed. The necessity for clearing away this

pathological exudate becomes all the more important when we call to mind the fact that it serves, not only as a medium in which certain pus microbes may grow and multiply, but also as a colloid, in the presence of which crystallization of urinary salts is both favored and the conditions presented for the impaction and growth of calculi. It was probably as a preventive against calculus formation that Ultzmann used a one-tenth per cent. sol. of salicylic acid in cases of phosphaturia, for surely the injection of such a solution into the bladder would not prevent the secretion by the kidneys of urine, in which the phosphates were both abundant and prominent. As against phosphatic incrustations of the bladder wall, or parts of it, I find the salicylic acid solution very much more efficient than those commonly in use, such as acetate of lead with acetic acid, potassium permanganate, amyl nitrate, except, of course, in cases of tubercular cystitis with tendency to formation of secondary calculi, where an astringent is of more service.

Another useful field for the application of salicylic acid is afforded by the urethra. Now that we pay attention to the antiseptics of the urethra, as well as to that of the instruments which we introduce through it, all agents which assist in the cleansing of this duct are of interest. To a limited extent the salicylic acid is applicable here. It is, I suppose, within the experience of all surgeons who are accustomed to inspect the urethral wall through an endoscopic tube, to observe occasionally urethrae which are not washed clean of adherent mucus and pus, even by the emptying of a full bladder. Such cases I have not infrequently seen myself, where upon the introduction of an endoscopic tube after free urination, small grayish muco-purulent masses may be observed adhering to the mucous membrane about the mouths of the glands of Littre when in a state of inflammation. Sometimes it is not easy to wipe these off with a bit of cotton on the end of a probe. Mild carbolic acid solutions do not remove them, nor do mild sublimate solutions. To irrigate an urethra with, say a two and one-half per cent. carbolic acid solution, and then to tie an instrument into the bladder for drainage, or what not, will in such cases, soon be followed by the appearance of a muco-purulent discharge about the meatus and around the catheter. To obviate this, I have for some time been accustomed to irrigate the urethra with the salicylic and boric acid solutions—a proceeding which has entirely accomplished the purpose. The extent to which the Tiersch solution will clean off the urethral mucous membrane is

easily seen when one attempts after such irrigation, to introduce a flexible, india rubber catheter, lubricated with glycerine. The glycerine being wiped off, the instrument will be observed to adhere closely to the urethral wall, so that it will not advance, except by the application of considerable force. The natural lubricant, namely, the urethral mucus has been cleared off by the salicylic acid, and the mucons membrane adheres almost as if joined by a cement. By thus cleansing the urethra, I have been for some time enabled to drain the bladder through a catheter tied in, both in cases of cystic disease, which demanded this form of treatment, as well as after surgical operations, or where fistule were to be healed. By thoroughly cleansing the bladder, the posterior and anterior urethra, by using thick borated glycerine as a lubricant, and by carefully looking after the cleanliness of the instrument, I have within the past twelve months been enabled to adequately, and comfortably for the patient, drain bladders which previously required at my hands a perineal button-hole. In two cases of prostatectomy by the supra-pubic route, in one of which I button-holed the urethra for drainage, and in which a supra-pubic fistula appeared subsequently to withdrawal of the drainage tube, the fistula closed after seven and twelve days' drainage "per urethram." In each case the urethra, anterior and posterior, as well as the bladder, were first thoroughly washed with Tiersch's solution before the catheter was introduced. And in neither case was the instrument withdrawn, nor was it necessary to withdraw the instrument for the purpose of cleaning it until the fistulæ had closed. I had not been able to accomplish drainage for such a length of time under any other method.

A THERAPEUTIC NOTE ON ALOPECIA AREATA¹

BY

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IN the following brief note I wish to call attention to a single method of treatment in alopecia areata which I have employed for a number of years most satisfactorily, but which does not appear to be generally known, although I have casually mentioned it on several occasions. The results obtained have been watched and noted by many physicians, as I have con-

¹ Read before the American Dermatological Association, September 24, 1891.

stantly made use of the treatment in my lectures and in my several clinics, and many will bear me out in the assertion that the results obtained are certainly most satisfactory, as compared with those resulting from other and well recognized modes of local treatment.

I am well aware, of course, that in many cases of alopecia areata spontaneous recovery will take place, even after repeated recurrences, and that we should be careful as to how we claim to cure a disease of whose causation we know so little. But the observation of several years, in a very considerable number of cases in private and public practice, has convinced myself and others that the method to be alluded to is certainly followed by satisfactory results, so that of late years I have applied it almost invariably, with the anticipation of much success. I will only add that, in advocating the treatment here described, it is only as a local measure, in place of other applications, and not at all to the exclusion of proper internal and dietetic measures, which I regard as necessary to overcome the condition giving rise to the alopecia areata.

The treatment to which it is desired to call attention is simply the very thorough application of pure carbolic acid, or, rather, a 95 per cent. solution of the same, well rubbed into the affected patches, one or more times, as will be described. I commonly employ a wooden toothpick, with cotton twisted on the end, making a small swab; this is dipped in the acid and at first brushed lightly over the affected area, which is then afterwards well and firmly rubbed with the same for some seconds. I generally extend the application somewhat beyond the area actually bereft of hair, that is, when touching small separate spots. The application is a little painful at first, but I have never found patients object to a second application, when necessary. I seldom apply it to more than two or three square inches at a sitting, even when the disease is extensive; where there is a large area the surface is treated in successive portions, at intervals, perhaps, of some days.

The effect of the remedy is, as is well known, to whiten and shrivel the skin, which, in a day or two, becomes slightly inflamed, and within a week or ten days the epidermis layer will exfoliate, leaving a reddened surface beneath. Occasionally there will be a little vesiculation, but among dozens of applications I have never seen anything which could in any way be regarded as a slough, and never such excoriations as are frequently found on other portions of the body from the accidental or in-

tentional application of strong carbolic acid. In my experience the tissue affected by alopecia areata on the scalp, at least, seems to present a different reaction, as regards this agent, from that found in normal skin. In my first employment of this remedy I proceeded with great caution, but now I rub vigorously with the little swab, without having ever seen cause for regret. I have not used this plan of treatment in alopecia areata of the bearded face or other portions of the body.

It is very commonly necessary to make more than one application of the acid to patches of alopecia areata, and I have generally allowed two weeks, sometimes longer, to elapse before treating again the affected patch; in a number of instances I have made but a single application, and by the expiration of two or three weeks a fine, downy fuzz could be seen, which increased into good hair.

In many of my cases this plan of treatment has been used in conjunction with other local measures, and also with internal and dietary treatment; but in a number of instances it has been employed solely and alone, for the purpose of demonstration. In the former there was always a marked difference in the growth of hair where the acid had been applied, and in the latter I have repeatedly demonstrated the growth of hair in tracts to which the application had been made, in contrast to those left untreated.

The following case in private practice demonstrated, in a most remarkable manner, the effect of the remedy in this disease:

Mr. A. B., aged 22, had first begun to lose his hair in patches one year before his first visit, September 21, 1889; the trouble had increased, until when first seen the scalp was almost entirely bare, with an irregular, narrow fringe around the edge and occasional small tufts here and there. He was given strychnia and phosphoric acid internally and a veratria ointment to the scalp, with occasional shampoos with tincture of green soap.

There was some slight, downy growth observed over some of the surface within a month or six weeks, and then, on December 9th, an application of carbolic acid was made. For the purpose of clinical demonstration the acid was rubbed into a surface on the bald crown of the head, over an area one inch wide by two inches long; the angles of this parallelogram were made sharp and the patch clearly defined. To be brief, it may be stated that this rectangular patch first burned was subsequently

an object of much interest to both of us, because of the very marked and peculiar appearance presented later when the hair really began to grow vigorously upon it. I purposely avoided treating the surface near it very actively, although I burned successively other portions of the scalp. About two months after the first burning, the patch presented firm, thick, dark hair, about an inch long, which stood out in a most curious manner from the rest of the scalp, which was beginning to show a greater or less fine hair growth, and I took occasion to show the peculiar appearance to several medical friends who happened in. I find on my notes that the difference between this first patch and the rest of the scalp was noticed for some months. Our "asparagus bed," as we called it from its shape, continued to maintain its vigor until he was last seen, about a year from the first, with a perfect and full growth over the entire scalp.

Another very similar and striking case may be mentioned, where about the same experiment was repeated before the class at the Post Graduate Medical School.

Mary G., aged 28, first began to lose the hair in spots four months before she came to the clinic, October 15, 1890. The characteristic, smooth, bald areas continued to appear, so that at the time fully two-thirds of the surface of the scalp was bereft of hair. Most of it was smooth and shiny, with little attempt at the reproduction of hair, but with some tufts of long hair still adherent here and there.

An oblong, rectangular surface, covering about two square inches, directly on the vortex, was well painted and rubbed with carbolic acid; this and the adjoining surface was free from hair, but with some slight attempt at downy production here and there. For various reasons the patient attended the clinic very irregularly, and neglected the internal and other treatment for a long time; she then came at intervals, and really had in all very little active treatment.

Some six months after her first visit she reappeared for treatment, and then it was noted that the sharply defined, rectangular area which I had treated with carbolic acid, had become covered with a growth of long, dark, strong hair, presenting a striking contrast to the bare surface around, it forming, as an assistant forcibly recorded at the time, "a veritable oasis, with the denuded patches everywhere surrounding." The rectangular outline of the new growth of hair, in this case, as in the preceding, left no shadow of doubt as to the result of the treatment employed. I will not occupy your time with the recital of other

cases, but will only say that many other illustrations of the effect of the remedy could be presented, although none, perhaps, more striking, inasmuch as, for the purpose of demonstration, the application was, in these instances, made in a peculiar and unusual figure, in the center of bare places.

I have little to add in regard to the supposed *modus operandi* of the remedy. As is well known, I am no believer in the parasitic origin of alopecia areata, but from observation and analysis of cases I am the more confirmed in my belief in its neurotic origin. If pressed for a theory I should say that the profound impression made on the cutaneous nerves of the affected part by so strong and thorough an application of carbolic acid, in some way restored normal innervation to the affected area, even as we know that counter-irritation will relieve deep seated pain in various regions.

I recognize also that, in one sense, there is nothing absolutely new in the mode of treatment which I have here advocated, for it has long been a custom with many to blister patches of alopecia areata, and we have all probably seen the hair re-grow after stimulation thus produced. I would claim, however, that it is a cleanly, convenient, and effective mode of treatment, and one much less troublesome and alarming to the patient than ordinary blistering, and in my hands has proved far more successful than any of the milder methods with which I am familiar.

4 East Thirty-seventh Street.

A STUDY OF MYCOSIS FUNGOIDES, WITH A REPORT OF TWO CASES.

BY

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AND

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(Concluded from page 8.)

AUTOPSY—*Case 2.*—An autopsy of this case was made twenty-four hours after death, and the following notes made: The body weight was 120 pounds, and length five feet, ten inches. There was marked emaciation, the

features drawn and pinched and the extremities and neck strikingly thin. In general appearance the skin was slate-colored, and studded with numerous small, round, flattened, pale tumors and tubercles, some covered with blood crusts. There was also a small abscess, apparently resulting from a broken down tumor, in the abdominal parietes just to the right of the linea alba in the hypogastric region, which opened externally. There was the usual post-mortem lividity, no apparent decomposition, and rigor mortis was not marked. The head was of the average Caucasian type. The entire scalp, part of the face, and the neck were the seat of ulcerative fungid growths. The thorax was of good shape and well proportioned to the rest of the body. On opening the thorax, a small clear effusion was observed in both pleural cavities, and the left lung was somewhat congested. The pleurae also appeared congested, and punctiform ecchymoses were to be seen all over their surfaces. The heart was normal both in size and weight. There was a slight excess of fluid in the pericardium, with bands of lymph on the visceral layer while the parietal layer was markedly hyperæmic. On a section of the heart, large chicken fat and currant jelly clots were found in the right side. The heart muscle was firm, showing no evidence of degeneration. The aorta in the first third of its ascending portion was atheromatous. There was slight ascites with some purulent effusion in the peritoneal cavity. The visceral layer of the peritoneum was highly congested, the capillaries being as conspicuous as when seen in a colored diagram. The liver, which was considerably enlarged, weighing eighty-eight ounces, was pale pink in color and mottled, with areas of lymph on its surface. Its cut surface presented a nutmeg appearance characteristic of cirrhosis and fatty degeneration, which was substantiated by subsequent microscopical examination. The pancreas was normal in size and appearance. The spleen was much enlarged, weighing fifteen ounces, and was the seat of an old hemorrhagic infarction, that on microscopical examination showed cavernous change. The kidneys were somewhat fatty, the right weighing six and a half, and the left four and a half ounces; in other respects normal. The bladder was empty; its mucous surface normal, the serous congested. The small intestines, as well as the large, were bound together with plastic adhesions. The stomach was firmly attached to the liver, and the omentum bound down to the peritoneum on the left side. The vermiform appendix bore evidences of an old perityphilitis in the shape of

adhesions holding the head of the caecum down firmly. The brain was not removed.

Histological examination.—As the results of the examination of the lesions from both cases were identical we shall deal with them conjointly. All the histological studies were made on tissues taken from the living body; these tissues were handled with care and in accordance with the best and improved methods of technique. The tissues were hardened in two ways: one set in Müller's fluid; the other in alcohol, beginning with a fifty per cent. solution, then changing to an eighty per cent., then into a ninety-five per cent., and finally into absolute alcohol. Some of the tissues was stained in bulk in a solution of lithium carmine, using hydrochloric acid as an agent of differentiation; other portions were stained after section in Bismarck brown, a few drops of a saturated alcoholic solution of eosin serving for differentiation. All the sections were imbedded in paraffine and cut dry, being transferred directly to a glass slide and fixed with a solution of collodion and oil of cloves before the paraffine was dissolved out with turpentine, so that the relative position of the cells to one another as they occurred previous to manipulation was preserved.

Sections made from fully developed tumors were found on microscopical study to consist of the following elements: On first focusing a field it appeared to be made up entirely of lymphoid cells, having much the general appearance of the cells of a small, round-celled sarcoma; but closer scrutiny and higher powers with favorable illumination revealed a fine embryonic connective tissue stroma in whose loose meshes the small lymphoid cells reposed. The cells themselves were slightly oval, varying but little in shape and size, being about as large as a white blood corpuscle. The nuclei were large, occupying almost the entire cell area. In these fully developed growths very few capillaries were to be seen, nutrition probably taking place through channels as in the sarcomata. In proof of this, spaces were to be seen containing leucocytes and red blood corpuscles. Here and there were areas of cheesy degeneration, due undoubtedly to the aforesaid decreased blood supply.

Sections made from tumors of moderate size—less matured or advanced growths—exhibited the same structure, save that they presented in addition some of the elements of the normal derm. A most characteristic feature of these fields was the crowding together of the lymphoid cells around the capillaries, giving much the same picture as a syphilitic gumma.

Sections of the skin from erythematous locations were particularly interesting. Here, as might be expected, there was turgescence of the capillaries, with a diapedesis of the red blood corpuscles, and considerable round cell infiltration. The round cell infiltration was not uniform but occurred in spots. The epidermis was normal and the papillae preserved intact, the round cell infiltration being limited above by the rete Malpighii. In sections made from patches of skin approaching the normal, a round cell infiltration was seen in the corium, though of much less magnitude than in the erythematous tissue; the corium was also thinner.

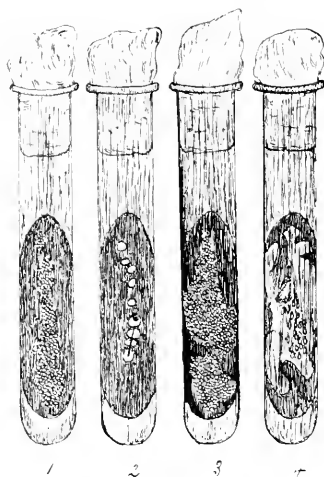
Bacteriological investigation. — At the earlier part of the period of observation of Case 1, before there was more than one ulcerating tumor, and before the febrile action had become at all continuous, portions of the ulcerated growth, of the non-ulcerating growths, of the red scaly skin, and of the least affected skin were taken, with all proper precautions as regards perfect sepsis, for the purpose of microscopical examination for bacteria, and placed in absolute alcohol. Later, in the course of observation of this same case, additional material was obtained for the same purpose. From Case 2 the material was obtained as soon as possible after the case came under observation, which was necessarily when the disease was well advanced. Material for culture experiments was also obtained on these several occasions and from both cases. The cultures were made from the blood from the fully developed tumors, from broken down tumors, and from areas of skin apparently unaffected, obtained by means of a sterilized needle; cultures were also made from pieces of tumors. In the second case also bedside inoculations with material taken directly from the patient were made with a guinea pig and a rabbit, and will be referred to later. In the bacteriological investigation, therefore, and this we wish to emphasize, from the very beginning steps in obtaining material and throughout the various procedures, the greatest possible cleanliness and care were exercised. Moreover, the investigation, as stated above, was made with material obtained from the living subject. Everything employed was thoroughly sterilized. All gelatin and agar were over two months old and perfectly clear at the time culture experiments were begun. The media employed were gelatin, neutral nutrient gelatin, neutral agar-agar, glycerin agar-agar, and steamed potatoes. Both test tube and plate cultures were employed, and in making the latter the improved discs of Petri were used. The potato cultures were

placed in large test tubes, instead of covered dishes, and tightly plugged with cotton.

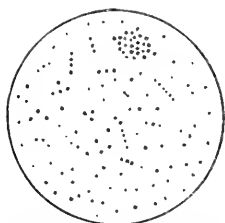
Cultures made from the blood from the several sources above named were placed under different conditions of environment, and watched carefully from day to day. Those cultures which grew upon glycerin agar-agar and were kept in an incubator at a constant temperature of 37°C., were most satisfactory, both as to rapidity and character of the growth. Cultures kept at other temperatures and upon other media were slower in their development and of an indefinite character. Cultures made upon nutrient gelatin, kept in a room with a temperature of about 30 $\frac{1}{2}$ °C., were sometimes five and six days in developing and did not liquefy the gelatin. Particular stress is to be laid upon this fact, inasmuch as these growths, or, rather, similar growths described in connection with this disease, have been looked upon as accidental, as in fact ordinary staphylococci. Those cultures that were made under the most favorable conditions of media and temperature, developed their characteristic appearance within seventy-two hours, and even after twelve hours' sojourn in the incubator a growth along the path of the inoculating needle was visible. Superficial cultures were also more satisfactory than stick cultures. The primitive cultures were of necessity more or less impure, but by plating them and picking out characteristic isolated colonies with which to repeat the culture, a pure growth was at last obtained. To reach this desired end a series of seventeen reinoculations was necessary. These pure cultures gave the following macroscopical appearances: The growth which was of a grayish tint and of the consistency of jelly, in its earliest stages, followed the general course of the needle, budding out, however, all along its course in little bulb-like processes. This gradually spread until nearly the entire surface was covered. The growth was very tenacious and elastic, and it was with great difficulty fractured by a platinum needle, oftentimes an *öse* or a knife-blade needle being required. There was no peculiar odor given off by this growth, nor were there any visible liquid products. Cover glass preparations made from these cultures and stained with basic aniline dyes showed the growth to be made up of micrococci. These were found to be 0.75 μ in diameter.

Numerous sections of tissue from the several sources named, that were hardened in absolute alcohol and stained according to the method of Gramm, were carefully examined and showed micrococci of the same diameter and character as described

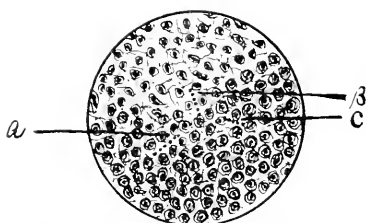
above. They were to be seen in the interstices between the cells and in the capillaries among the blood corpuscles. They



1. CULTURE, GROWN FROM BLOOD TAKEN FROM FULLY DEVELOPED TUMOR. ACID-AGAR-AGAR, AT 29° C., ONE WEEK OLD.
2. CULTURE, GROWN FROM BLOOD TAKEN FROM UNAFFECTED SKIN. ACID-AGAR-AGAR, AT 29° C., ONE WEEK OLD.
3. CULTURE, GROWN FROM PIECE OF TUMOR. ACID-AGAR-AGAR, 29° C., ONE WEEK OLD.
4. CULTURE, GROWN FROM BROKEN DOWN TUMOR. ACID-AGAR-AGAR, 29° C., ONE WEEK OLD.



COVER GLASS PREPARATION SHOWING MICROCOCCI. TAKEN FROM CULTURE. MAG. 850 X.



SECTION OF TUMOR SHOWING MICROCOCCI IN THE TISSUE. A, B AND C POINT TO THE BACTERIA. MAG. 850 X.

were particularly thick in the sections from the fully developed tumors: sparsely distributed among the cells of the corium in

sections from the erythematous and scaly skin; and from the skin least affected, were to be seen only in the capillaries.

In the inoculatory experiments, made with cultures, sixteen animals were employed, eight rabbits and eight guinea pigs; the inoculations were made into the cellular tissue in the groin in the rabbits and into the peritoneum in the guinea pigs. In all of these the inoculations were made by means of Sternberg bulbs.¹

The results, so far certainly as regards any cutaneous lesion, were all negative, as may be seen by the following table:

No.	Animal Employed.	Date of Inoculation.	Date of Death.	Results shown on post mortem.
1	Rabbit.	April 10.	April 18.	Strongyli in liver.
2	"	" 10.	" 30.	Lungs congested; strongyli in liver.
3	"	" 10.	May 17.	Gastric ulcer.
4	"	" 10.	" 20.	Lungs congested; heart greatly distended; spleen enlarged; liver contained large node, which on microscopic examination proved to be an angioma.
5	Guinea pig.	May 4.	May 10.	Echymoses in stomach.
6	"	" 4.	" 11.	General peritonitis, with adhesions; acute pericarditis and pleuritic adhesions.
7	"	" 4.	June 15.	Killed; no lesions observed.
8	"	" 4.	" 15.	Killed; no lesions observed.
9	Rabbit.	" 10.	" 15.	Coagulation necrosis of stomach.
10	"	" 10.	May 18.	Strongyli in liver.
11	"	" 10.	" 18.	Thickening of pyloric end of stomach.
12	"	" 10.	" 19.	Strongyli in liver.
13	Guinea pig.	" 21.	June 15.	Killed; no lesions observed.
14	"	" 21.	May 29.	Peritonitis.
15	"	" 21.	June 15.	Killed; no lesions observed.
16	"	" 21.	" 15.	Killed; no lesions observed.

¹ Sternberg bulbs are made by sealing up one end of a piece of heavy glass tubing, heating in a blast flame until the glass becomes soft, and then blowing through the tube from the other end until a bulb about one inch in diameter is formed. The tube is next beated about one and a half inches from the bulb and drawn out into a capillary point, one or two inches in length. The manner in which they are used is as follows: The bulbs are first sterilized and their points sealed up in a flame. The bulb is then heated slightly over a flame, and the extremity of the neck, after breaking off the sealed point, is plunged beneath the surface of some nutrient liquid. As the bulb cools the liquid is drawn into

In addition to the above experiments, the guinea pig and rabbit inoculated at the bedside remain to be referred to. Both of these animals are still alive, and as yet have given no evidence of ill effects. Examinations have been repeatedly made since, but nothing indicative of a positive result has been discovered, not even any thickening remaining at the seat of the inoculations.

Conclusions.—The clinical symptoms of the ordinary type of mycosis fungoides are presented in the cases here reported, the extremes in fact of the average case. The first, showing a short precursory erythematous stage and comparatively few tumors, and the second an extended course of prodromal symptoms, followed by innumerable characteristic growths and fungoid ulcers. Another type, exceptional in occurrence, is that in which the preliminary erythematous symptoms are lacking, the disease first showing itself by the appearance of the peculiar fungoid growths which are, as a rule, few in number. In this exceptional type, the erythematous symptoms may, or may not be subsequently added.

In the ordinary cases the course of the disease permits of a rough division into several stages. The first stage is that of erythematous and slight eczematous manifestations, comprising, as a rule, fugacious erythematous lesions, such as simple erythema, mild erythematous eczema, and urticarial lesions. The second stage is somewhat similar to the first in its manifestations except that the eruptive phenomena show degrees of infiltration and are not so evanescent in character. The third

the bulb, owing to the vacuum produced, usually filling it about one-third of its capacity. The neck of the bulb is again sealed up, and the liquid which has been introduced is sterilized by repeatedly placing the bulbs in boiling water for half an hour for three consecutive days. They are then placed in the incubator at a temperature of 37°C., and if at the end of two or three days they remain perfectly clear, transparent, and free from film, they are fit for use. To inoculate the liquid in the bulb the neck is heated in a flame to sterilize the exterior, and the bulb is gently warmed and the extremity of the neck nipped off with a pair of sterilized forceps. The open extremity is plunged into a solution made of sterilized water and micro-organisms, a minute quantity enters the tube and mingles with the fluid in the bulb, without fear of contamination by atmospheric germs. The extremity of the neck is once more sealed up in the flame of a Bunsen burner. A separate bulb for each inoculation is necessary, and the point must be passed through a flame before breaking off and introducing into the body of an animal. The fur or hair is to be cut from the part which is to be the seat of injection; then a spear-pointed lancet is passed through the flame and thrust, while still warm, into the spot which has just been washed with a solution of corrosive sublimate, 1 to 1,000, and is carried clear into the connecting tissue. The point of the prepared bulb is now passed through the flame, the point rapidly broken off with a pair of sterilized forceps, and the open extremity introduced along the side of the lancet into the deep tissues. Heat is now applied to the bulb and the fluid is injected into the cellular tissue with considerable force.

stage is distinguished by its tumor growths, varying in size from a pea to an orange, with a disposition to become superficially ulcerated and fungoid. Even these lesions may appear and disappear more or less capriciously. The next stage is that in which the ulcerations tend to become deeper-seated, with a marked fungoid tendency and we then have the disease presenting itself as eczema, tumors, fungoid masses, mushroom-like and crateriform ulcers. This stage rapidly leads to, and is really part of the final stage, that of cachexia, with symptoms common to septicæmia, ending rapidly in death. Itching, which is usually one of the most annoying symptoms, is rarely absent.

The literature discloses that the disease is more common in males, that it is an affection of middle adult life, most common between the ages of forty and fifty. It varies in its duration from a few months to ten or fifteen years. It occurs apparently among all nationalities, is entirely independent of syphilis, tuberculosis, and leprosy, with no evidence of heredity or contagion. A case of recovery after an accidental migrating erysipelas was recorded by Bazin, one after the administration of arsenic by Köbner, and one by Geber. In the two cases reported in this paper as the notes portray, the administration of arsenic both by subcutaneous injection and by the mouth was persistently tried but exerted no influence upon the course of the disease.

The post mortem observations are collectively of great interest inasmuch as in many respects they closely tally in all the cases reported. The prominent and more common lesions are hypertrophy of the spleen and of the liver, especially the latter, inflammation of one or all serous membranes with resulting œdema, ascites, pleurites, pericardites, etc. In respect to the liver, fatty infiltration with concomitant cirrhosis is evidently the cause of the hypertrophy. Hemorrhagic infarction seems to be common in the spleen. The absence of metastatic deposits is also of import; the two isolated cases in which neoplastic tissue was found in the walls of the bladder, seems to us, it could be traced to other causes than that of the dermal lesion, and might even be considered as primary there. Moreover in these two exceptional cases described respectively by Duhring and Galliard, the lesion consisted simply of round cell infiltration beneath the mucous membrane in the walls of the bladder, a condition that not infrequently obtains when there are no tumor growths of any character whatsoever on the body.

In the histological examinations the majority of observers are practically in accord, all having almost invariably found the epidermis thinned, the rete Malpighii a mere wavy line, the papillae squeezed out by the pressure of the growth from below, making them shorter and broader, and the corium infiltrated with small round cells. All likewise agree in denominating the cells forming the tumors as lymphoid, and many have been able to distinguish a fine embryonal connective tissue meshwork between the cells. In fact, there is much unanimity in the histological study of this disease, but the interpretation placed upon such investigations have been varied. Thus the French consider the disease lymphadenomatous; the Germans differ somewhat, a few regarding it as sarcomatous, while the majority, led by Anspitz' studies as granulomatous. English and American opinion is also divided, although the predominant view follows that of the prevailing German opinion. Our own observations point to the classification of the disease given by Anspitz — granuloma — as the correct one.

Micro-organisms have been found and described by several investigators, notably Anspitz, Rindfleisch, Hochsinger and Schiff, Hammer, and De Amicis; others, as Kaposi, Payne, Dönitz and Lassar, Funk, Neisser, Maiocchi, Vidal and Brocq, Tilden and Ledermann, have either failed to find such organisms in their examinations, or, admitting their possible presence, have looked upon them as either pyogenetic streptococci or merely fortuitous non-pathogenic forms.

The word "granuloma" has been used by many writers in connection with this disease, possibly as much on account of the round cell infiltration as because it presented any relation to the specific inflammations. The so-called specific inflammations comprise a group of diseases which have been described under several names, such as infectious granulation tumors, specific granulomata, infectious granulomata, etc., and include tuberculosis, lepra, syphilis, glanders, actinomycosis and rhinoscleroma. This group is on the border line between inflammation and hyperplasia or true tumor formation, having some characteristic in common with both. Morphologically the various diseases of this group consist of lymphoid cells within an embryonal connective tissue matrix. As this embryonal connective tissue is common in other inflammatory processes where granulation tissue results, the name granulomata has been applied to them, but it differs from the granulation tissue in ordinary inflammations by not tending to organize but remaining as

granulation tissue for long periods of time. They differ again from inflammatory processes pure and simple, in that the phenomena of inflammation are absent, that there is no tendency to the absorption of the exudate, and also, there is no formation of fixed connective tissue, the cells retaining their embryonal character. They are, however, eliminative and proliferative processes, in which respects they resemble inflammations. They form tumor-like foci, spread by continuity and contiguity of structure, and hence resemble tumors to some extent. There is a tendency to well marked early degeneration, particularly cheesy degeneration, and another peculiarity is the relative absence of blood vessels in their structure. More characteristic than the histology, however, is the etiology, they all being presumably produced by peculiar micro-organisms.

From our clinical, histological and bacteriological study of these two cases, together with a consideration of the literature of the subject, we would favor classifying this disease, therefore, under the specific granulomata for these reasons: We have to deal with a proliferative eliminative process characterized by the production of exudates with non-absorption, and the production of tumor foci poor in blood supply and readily undergoing cheesy degeneration. These tumor foci are made up of lymphoid cells lying in the loose meshes of an embryonal connective tissue framework, the small, round cells huddling around the blood vessels as in syphilis. Peculiar micro-organisms are present in the tissues and are capable of cultivation on nutrient media. This to us forms a picture of a specific granuloma. The relation between the micro-organisms present and the etiology of the disease is of course in *statu quo* until numerous and satisfactory inoculatory experiments shall stand for or against the microbes as a cause.

Indeed, unfortunately, it would appear from our own various inoculatory experiments, taken together with similar ones made by other observers, that it is impossible to produce the disease in animals. One possible exception to this statement should be referred to, and that is the experiment made by Schiff, in which a kitten was inoculated and developed a lymphoidal growth at the seat of inoculation. In experimental inoculations upon animals, however, several facts are not to be lost sight of. The disease is an insidious one, and the period of incubation often extending over months and years. While, therefore, the results from inoculations, a few weeks or months

after they are made may be negative, it is possible that such experiments would have a more positive result after a greater lapse of time. Then too, the choice of animal may have an important bearing upon the result. It is possible that certain animals may be more susceptible to this disease just as the guinea pig is to tuberculosis.

That there are cocci present, is, if we are to judge by our results and the results obtained by others, seemingly certain, but as to their being streptococci or diplococci opinion is divided. From the character of the growths upon the different media, the shape and size of the organisms and from their relative position to one another on cover-glass preparation and "Klatsch" preparations, we feel satisfied that the germs we have found were not streptococci of any kind, nor diplococci, but micrococci.

That they are pathogenic and *sui generis* of mycosis fungoides, we are not justified in saying in the present state of inoculatory experiments, and the paucity of data from which to draw inferences.

However, the fact that these micro-organisms grow best on glycerin agar-agar, a medium in which the germs of tuberculosis, glanders and lepra are best cultivated, would seem to point to a pathogenic feature as one of their characteristics. But the possibility of their being suppurative forms is, we believe, out of the question, as they are much too small, they do not liquefy gelatin, and moreover, the gross appearance of culture growths is entirely different. The essential point for future investigation to establish definitely is the relation or non-relation of these micro-organisms to the disease, and if they are the cause to ascertain their origin and their mode of ingress into the human economy.

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A CASE OF SARCOMA OF THE ARM INVOLVING THE SKIN—AMPUTATION—RECURRENCE IN THE STUMP A YEAR LATER.¹

BY

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THE following case is of interest, chiefly on account of the difficulty of diagnosis and the rather unusual course of the affection which in a comparatively early stage rapidly involved the lymphatic trunks of the arm, and the glands in the axilla. The microscopic characters of the affection are also somewhat unusual, and are fully described separately by Dr. Wyatt Johnston, who kindly examined the various specimens for me.

Case.—C. A. B., machinist, æt, 35, married, entered my service at the Montreal General Hospital on May 28, 1890, complaining of an ulcerated left forearm.

Patient lives in the country and has always been very healthy. There is absolutely no history of syphilis. Has been married two years, and his wife had a miscarriage in 1888, and a healthy child now living born in 1889; never, that he knows of, had any injury to the arm.

History.—About the middle of December 1888, he first noticed three small nodules about the size of peas beneath the skin, covering the back part of the middle third of the left ulna. These nodules were painless, and moved freely beneath the skin. They gradually increased in size, and became adherent to the skin; soon the skin became red and inflamed, and finally in August, 1889 (eight months after the commencement of the disease), they ulcerated. The ulcers were poulticed freely, but this treatment seemed only to hasten the rapidity with which they deepened and enlarged, and now, for the first time, they became very painful, the pain being especially severe at night. The three sores thus formed, soon became one large irregular ulcer with sharp edges, and sloughy base. The discharge was never great and was of rather a watery consistency. Later on other lumps appeared in the neighborhood, which also became attached to the skin, and breaking down subsequently resulted in small ulcers.

Condition on entering Hospital.—The patient is a well

¹Read before the meeting of the American Dermatological Association, Washington, September 5, 1891.

nourished man, having a healthy appearance and with a good appetite. He says he has not lost flesh lately. Heart, lungs, kidneys, etc., are found to be perfectly healthy. On examining the left forearm, three large ulcers are seen on the middle third of its extensor surface. The largest is the size of a 25 cent piece. They are deep, purulent with sharp indurated edges and irregular in shape; the bases are sloughy and have rather a honeycomb appearance. The surrounding skin is red, swollen and eczematous. Near the elbow are several smaller ulcers and between the two sets of ulcers are a number of small shot-like nodules quite moveable beneath the skin. In addition to this, on the inner side of the biceps from the bend of the elbow to the axilla, can be felt a chain of nodules, large and small, which feel very much like buckshot under the skin. They seem to follow the course of blood vessels. They are painless, and are covered by perfectly healthy skin. The arm is comparatively useless, the hand being swollen and oedematous, and the extensor muscles paretic, this causes the characteristic wrist drop. A portion of one of the growths was excised and submitted to Dr. Wyatt Johnston, pathologist to the hospital, who pronounced the case to be probably one of spindle celled sarcoma, but he should like specimens for further examinations. However, it was decided to try antisyphilitic treatment, and the patient was put upon gr. xx pot. iod. three times a day, largely diluted, at the same time black wash was applied to the ulcers, the dose of iodide was increased to one drachm three times a day, and there was for a time marked improvement, but later this improvement ceased, and the patient's condition remained much the same as it was previous to treatment. The pain returning and the ulcers, which at one time, showed a tendency to heal, increasing slowly in size. The iodide treatment was continued for a month, and had the effect of disordering the patient's digestion. Dr. Johnston wishing to have specimens for further examination, I placed the patient under ether and excised some of the deeper nodules which extended up the inner side of the biceps, these I found to follow the course of the lymphatic trunks and to be intimately associated with the veins, and they were, in consequence, difficult to excise. In appearance these lumps or growths were grayish in color, irregular and beady in outline and not encapsuled. On sections they were firm and the cut surface showed numerous opaque white spots, the size of pin heads with translucent tissue between. The wound caused by this small operation healed by

first intention, and from these facts this part of the arm was much less painful. The specimens thus removed were examined almost immediately by Dr. Johnston, who gave a more positive opinion that the case was one of spindle celled sarcoma, and advised removal of the arm.

The patient went home to settle his affairs and returned a month later, the 24th of July, and the reporter notes "that several new nodules have appeared about the elbow and up the inner side of the arm, also, that the first three ulcers on the forearm have coalesced forming one huge ulcer, with irregular, deeply excavated but firm edges and a sloughy face discharging a watery fluid."

The pain was so great that amputation of the arm at the shoulder joint was readily consented to. The operation was performed on the 26th of July, 1890. After removal of the arm it was seen that the axilla was filled with enlarged and infiltrated glands of the same character as the nodules removed from above the elbow, and that the affected glands reached even above the clavicle. They were all carefully dissected away, and this took time as they closely embraced the axillary vessels. The posterior flat was also studded with small nodules of the same character and a considerable portion of it had to be removed.

In two weeks the patient returned home with the wound completely healed by first intention, and feeling much pleased with the result of the operation, as it had entirely relieved the severe pain previously complained of.

I heard from him occasionally and the report was that he had rapidly gained flesh and was feeling perfectly well. However, by the beginning of May, 1891, about ten months after the operation, the stump became acutely painful, he could not sleep, and had recourse to opiates, he soon lost appetite and flesh and came again to the hospital in the middle of June, 1891, looking ill and miserable. Upon examining the stump I found that there was fulness in it which was not natural, and in cutting down in it I came on a large mass of new growth which did not involve the skin, but extended up into the axilla. I excised this very freely, and closed the wound, which healed in a few days. The pain was relieved, though not removed by this operation, but he returned home much better. He re-entered hospital on July 1st, saying that the pain had returned and was worse than ever, and that I must do something for him. At the previous operation I had removed the enlarged nerve

ends of the brachial plexus, but now I determined to dissect the plexus above the clavicle. This was done the next day, an inch from each cord being excised. I dissected freely, but could find no trace of the new growth above the clavicle, the glands not being involved. This operation completely relieved the pain. He returned home in a week feeling very well. I have since heard from him, and he says, with the exception of slight pain occasionally felt in the armpit, he was very comfortable.

Dr. Wyatt Johnston's Report on the Character of the Tumors.

—On May 31, 1890, examined a portion of growth from arm of C. A. B. Sections made after hardening in absolute alcohol show epidermis normal, cutis thick and dense; immediately beneath the cutis are a large number of flattened cells, resembling those seen in a large spindle-celled sarcoma, and arranged in loose clumps apparently within the subcutaneous lymph spaces. No lepra or tubercle bacilli. On June 27, 1890, examined an elliptical piece of skin, removed, with nodule attached, from the inner side of arm below elbow. It contained a small reddish papule the size of a split pea and situated deeply. In addition to the skin a large mass of infiltrated tissue was examined. On lightly scraping this a whitish juice was readily obtained, and was found to be composed of fatty detritus and large flattened cells of very variable outline. The diameter of these cells ranged from 0.015 to 0.050 m.m. Many of these cells were pear or anvil shaped, with a long tapering pole. Ovoid forms were very common; they lie close together, without any intervening inter-cellular substance. A small proportion were flattened and thin with folded edges. The nuclei were usually multiple, and a few of the cells showed highly refracting hyaline bodies beside the nuclei (plasmiosomata), but there was no appearance of parasitic plasmodia or bacteria. Cultures in glycerine agar remained sterile. The sections which were made after fixation in various fluids (absolute alcohol, diluted alcohol, Müller's fluid, 1 per cent. sublimate and Fleming's solution) showed the arrangement of the cells to be somewhat different to what had been anticipated from the appearance of the cells in the juice obtained from scraping the cut surface; now a delicate inter-cellular substance seemed to lie between each cell, and the appearance of the cells themselves in section suggest endothelium rather than epithelium. The nuclei were large and rich in chromatin, and mitotic figures were frequent, the diaster form being most common. The growth appeared to arise in the cutis and to be unconnected with the epidermis or rete; it did

not appear to proceed from the sebaceous glands, or from the sweat glands when it was seen in the earliest stages in the very small nodules, but the lymphatics seem to be the structures earliest involved. After amputation of the arm some portions of skin and gland tissue from the axilla were examined. Sections made through the skin showed to the naked eye a diffuse thickening. Under the microscope the epidermis is not thicker than normal and the fibrous tissue in the cutis is not increased, but a very considerable overgrowth of the several glands exists, together with a much less marked overgrowth of the sebaceous glands. This overgrowth, though extensive and ill defined at the borders, has more the appearance of adenoma than cancer and contrasts sharply with the tumor mass lying immediately beneath it. These tumor masses have precisely the same appearance as those first examined, and consist of large closely-set cells, flattened or of irregular spindle shape, and extremely rich in chromatin. A few dilated thin walled vessels are seen and also some minute hemorrhages. In the deeper parts of the subcutaneous tissue a number of enlarged lymph glands are seen, which show areas of spindle cell infiltration.

From a secondary operation performed in June, 1891, portions of infiltrated tissue were obtained which show the cutis and sub-cutis to be infiltrated by cells similar in appearance and arrangement to those seen in previous examinations. The spindle cell infiltration has involved the scar of the amputation wound. The tumor above described is certainly a rare one and presents many features of interest. From an anatomical point of view the most interesting fact is the co-existence of tubular adenoma in the sweat glands, distinct from the sarcoma. The structure of the tumor itself is also anomalous, at some spots resembling carcinoma in the nature and arrangement of its cells.

The early involvement of the lymphatics in this case made it one of unusual interest. Though the future prospects in the case are not bright, still the man by the amputation has gained at least a year if not more of comparative comfort. In his *Archives of Surgery*, Vol. II, p. 123, Mr. J. Hutchinson relates a case of a sarcomatous eruption imitating syphilis in which there was very general involvement of the lymphatic glands. In this case the nodules showed no tendency to ulcerate. Melanotic sarcoma, it is well known, has a tendency to spread by the lymphatics.

P. S. — Oct. 24, 1891. — Since reading the above paper I have heard from the patient, who says that an ulcerating growth, has appeared on the right cheek and is growing rapidly.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

211TH REGULAR MEETING.

DR. GEORGE H. FOX, *President, in the Chair.*

Lichen Planus—DR. ROBINSON presented a case of this affection. The patient was a woman, 44 years old; married; two children. Gives a history of rheumatism. She never had any eruption until three months ago, when she noticed a lesion on the right hand gradually extending to the right arm and afterwards to the left arm, and two weeks later to the body. It is especially marked on the right leg and shows some excoriations from scratching.

In the discussion of this case, Dr. Taylor said that he considered it a very pretty one. The appearance of this woman recalled to his mind the fact that a large number of these cases of lichen planus occur in fat women over forty or forty-five years of age.

DR. KEYES inquired whether any of the gentlemen present ever saw a case of lichen planus that did not eventually recover, unless the patient died of accident?

DR. SHERWELL said that he recalled a very obstinate case of lichen planus occurring in a woman, a coachman's wife. In this case the affection seemed to have become chronic and lasted for about three years, although she did eventually recover, and under the treatment of another physician. The case itself was typical.

DR. KEYES said that he had seen a number of cases of this disease in private practice, and that they all got well. One was a very desperate case. The patient, a man, was distinctly rheumatic by constitution, and he was attacked by this malady in a most intense form. The itching was simply intolerable. He saw a number of physicians and traveled to different places without getting much benefit. He had the disease for three or four years, and lost about forty pounds in weight. Finally he got well by taking the mud baths of Páso Robles. The man was between sixty and sixty-five years of age. This case, Dr. Keyes said, was the nearest approach he had ever seen to a fatal termination, and he came to the conclusion that in every case of lichen planus it is unwise to make a bad prognosis.

DR. ROBINSON, in closing the discussion, stated that in this case the lesion was very well marked on the back, especially in the right lumbar region. The spots in that location were of pin-head size, of a light reddish color, and flattened, shining surface. He considered the case an exceptional one, on account of the extent of the eruption. As regards the treatment, the patient was taking acetate of potash, with arsenic and colchicum.

A Case for Diagnosis.—DR. JACKSON presented a woman, 44 years of age, with a sore on the left side of her face which he thought resembled zoster. It began in June in the form of a little pimple, and since that time has been growing larger. The left side of the woman's face is paralyzed, and considerably swollen. The swelling came on about three months ago.

DR. ROBINSON stated that he had seen a case bearing considerable resemblance to this one, following cerebral hemorrhage. The lesion was confined to one side of the face, and remained for a number of weeks. This case, Dr. Robinson said, looked like acute dermatitis, in consequence of injury to the nerves. The case he saw before did not present the white patches apparent here; these, he thought, were formed of caseous material.

DR. SHERWELL said he firmly believed that the lesion was nervous in origin. The seventh nerve (the facial) was evidently involved, but he expected that the sensation was not much impaired.

DR. PIFFARD said he was inclined to think that on further investigation the case would turn out to be one of morphea, with just a possibility of tuberculosis, and that the paralysis was accidental. He thought bacteriological examination should be made. The seventh nerve was involved, but he failed to see any affection of the fifth, and it is in the latter affection that we should expect to see a neurosis of this kind rather than in the former.

Tuberculosis of the Skin — DR. CUTLER presented a woman with this lesion. It first made its appearance two years ago as a little pimple or papule on the hand over the third knuckle. It gradually increased in size and at the end of six months it ulcerated in the centre and healed under a scab. Then two or three ulcerated spots appeared, which healed up also. Dr. Cutler said that when he first saw it, it was about the size of a penny, without any pain or tenderness. He excised the mass as far as possible and brought the edges of the wound together with sutures. At the end of three months the disease appeared again in the scar. A month after he removed the first lesion, a similar one appeared on the opposite hand, which rapidly increased in size. About that time the woman began to complain of a troublesome cough, and upon careful physical examination a tuberculous process was found beginning in the right apex, and at the present time both apices are affected. She was, for a time, under specific treatment, mercurial ointment being applied to the lesion, but without any result whatsoever. The case is interesting from the appearance of the lesion on both hands, and from the fact of its reappearance in the scar after complete excision.

DR. MORROW inquired whether a microscopical examination was made in the case.

DR. CUTLER said there was not.

DR. KLOTZ said that he would accept the diagnosis of tuberculosis if the bacilli were found upon microscopical examination. He thought these cases were easily confounded with syphilitic lesions. He recalled the case of a man whom he presented to the Society some years ago. This man had warty excrescences on the back of the hands and on the wrist. He always improved whenever he regularly followed up specific treatment. The case was considered one of tuberculosis cutis by another physician who, however, was unable to find any bacilli.

DR. CUTLER said there was no reason to suspect syphilis in this case, and he could get no history of it, although the latter is unimportant. He had put the patient under specific treatment for a time, without getting any beneficial results.

¹A microscopic examination was subsequently made by Dr. Robinson and a number of tubercle bacilli found in one of the sections.

Acne Varioliformis.—DR. ALLEN presented a young man with this disease: the only case that he ever saw develop in this country, although he has seen a great many that came from the other side. The cure in this case was so very rapid that the disease is hardly apparent, although there are plenty of scars to show for it. The patient had them extend all the way around the chin and over the scalp. The lesions were very typical. About a year and one-half ago this man had an attack of alopecia areata from which he was cured. Lately he has had another attack, and he is just recovering his hair under the use of chrysarobin. He also presents a patch of alopecia on the thigh.

Folliculitis Pilaris Decalvans.—DR. SHERWELL presented a man with this disease. The man is 54 years old, and has had this trouble for sixteen or seventeen years. It started just at the border of the scalp, and is gradually working backwards. It comes in little spots resembling an acne and these gradually dry up into a crust. He is being treated with resorcin and salicylic acid. Dr. Sherwell said that this was the first case he had seen of this exact type. The condition was well described in an article headed, "Folliculitis and Perifolliculitis Decalvans," by Dr. Brocq of Paris, and published in the January number of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES for 1889. Dr. Sherwell gave a short *résumé* of Dr. Brocq's classification.

The above cases of Drs. Allen and Sherwell were discussed together.

DR. ROBINSON stated that he had never seen the lesions so far down on the forehead. He has seen them on the scalp, and described them as cases of folliculitis, very closely related to sycosis.

DR. FOX inquired whether the same lesion ever occurred on the genitals?

DR. ROBINSON replied that it does occur there, although not so frequently as on the scalp.

DR. ALLEN said that if Dr. Sherwell's case was to be classed with his, he wished to withdraw his statement that this was the first case he had ever seen develop in this country. He has seen such lesions on the face and scalp, but has never regarded them as pure cases of acne varioliformis.

DR. SHERWELL said that he had never before seen the lesion so distinct as in the case he presented. He could get no history of syphilis. There was no pus formation, and it seemed to be different from any other form. Folliculitis pilaris decalvans seems to be a good name for it. The only cases resembling it are those forms of discrete folliculitis we find in syphilites.

DR. MORROW stated that he had certainly seen half a dozen cases in which there were distinct cicatrices at the margin of the hairy scalp. He thought the term "lupoid" in connection with this form of disease should be discarded. It is a class which we know little about. The French have thrown more light upon them than any other investigators, and Quinquaud has included them in his category.

DR. PIFFARD said it made him "tired" to hear the terms "varioid" and "lupoid" used in connection with acne. The terms are too indefinite. Another indefinite term often employed is folliculitis, without any intimation of what follicles are involved; the principal follicles are the sebaceous, the sweat and the hair follicles, and when the word folliculitis is used, some

other term should be used in connection with it to explain what follicles are referred to.

DR. TAYLOR said that the clinical group as given in the article read by Dr. Sherwell was incomplete without adding to it the class of cases he (Dr. Sherwell) had referred to; namely, the form of folliculitis we find in syphilities.

DR. ALLEN stated that until a better form could be found, he thought the word "varioliform" should be retained in connection with this lesion, particularly as its appearance is often suggestive of variola. The small cicatrix it leaves resembles that of small-pox. In the discussion nothing had been said about the alopecia in his case. He thought it interesting because the man got entirely rid of it and after several years it had recurred.

Alopecia Areata.—DR. JACKSON presented a man with this affection. The history was as follows:—W. K., born in United States, age, 22; civil engineering; the patient has had dandruff for years, but the hair did not begin to fall until two years ago. Bald spots showed in the course of a year. When the disease began he was in a weak condition on account of very rapid growth. He had then a more or less constant headache, which continued until a few months ago. He has had more or less muscular rheumatism, and nasal catarrh—bowels regular; appetite poor; stomach easily upset; denies all venereal disease. There is no history of having had crusts on the scalp or any disease of the same. There are a number of small bald spots scattered over the top of the head, irregular in shape, white in color, and atrophic in appearance. Between the areas are islands of normal hair. The parietal and occipital regions are beginning to be invaded. The appearance of the disease strongly suggests favus, but there are no red bald spots, and no fungus in the hair. The hair pulls out more easily than normal, and sensation seems to be slightly impaired in the bald areas. The hair is black, thick and moderately coarse.

DR. KLOTZ was of the opinion that a previous condition must have existed in this case to explain the present lesion. He has seen cases where there was first a thick white crust, followed by this same scar-like appearance of the scalp.

DR. ROBINSON said he understood the disease was still spreading. From the number of spots and their sharp outline, he considered it to be a case of alopecia areata. It was not likely that complete recovery would take place.

DR. CUTLER stated that he agreed with Dr. Robinson's remarks.

DR. MORROW said that he considered this a typical example of the disease called by the French pseudo-pelade, and described by them under the heading "A" in the article read by Dr. Sherwell. It certainly does not correspond in its course and appearance with ordinary alopecia areata. The bald areas in this case are very irregular and eccentric in their march.

DR. SHERWELL thought that this case was correctly classified by Dr. Morrow, and that it was alopecia areata. In the latter disease, the hair follicles are not permanently destroyed, but will grow again. In this case the follicles are probably permanently destroyed.

DR. PIFFARD said that it is claimed that the hair follicles may be entirely destroyed and the hairs still grow again.

DR. ROBINSON stated that there are cases of alopecia areata where the hairs remain absent permanently.

DR. JACKSON said that the bald spots had a somewhat reddish appearance at night, due to the use of sulphur ointment, but there was absolutely no redness in daylight. He could get no history of any crusts or scaling, either from the young man himself or from his family. Apparently the disease is still spreading, but in a very irregular manner. On account of the constant headache and the appearance of the scalp, he had diagnosed this as a case of alopecia areata.

DR. ROBINSON asked Dr. Jackson in what percentage of these cases was headache a marked symptom.

DR. JACKSON replied that he did not know.

DR. ROBINSON said that according to Mr. Hutchinson's experience it was present in only two or three per cent.

DR. PIFFARD said that he is now treating a case of alopecia areata accompanied by headaches.

DR. MORROW stated that in eight cases of alopecia areata he had under observation, not one suffered from headache.

DR. FOX stated that in his opinion this disease was only accompanied by headache in exceptional cases. Sometimes the headaches cease when the hairs begin to fall out. He said that while the case presented by Dr. Jackson corresponded very closely to the description of pseudo-palade, referred to by Dr. Morrow, there was no inflammatory process present to separate it from alopecia areata. As stated by Dr. Robinson, atrophy of the hair occurs in cases of general alopecia, but in cases of small bald areas we can predict that the hairs will grow again in due time.

A Case for Diagnosis.—DR. ROBINSON presented a child (male) who had a lesion on the thigh and lower portion of the abdomen. Its appearance somewhat resembled a ring-worm. In the daytime, marked scaling was noticeable. It is superficial and has been there for three weeks. It does not appear to itch. He considered it a parasitic eczema. While it resembled ring-worm, he had excluded that affection by microscopical examination.

DR. MORROW thought the lesion looked like a magnified roseola, although it did not correspond with it.

DR. CUTLER said that he should describe it as a parasitic eczema, not that a parasite can be found in it, perhaps, but on account of the way in which it is produced and cured. He thought the lesions could be healed in four or five days—certainly ten days—by painting it lightly with iodine or a 50 per cent. solution of carbolic acid every two or three days and followed immediately by the continuous application of some soothing ointment, preferably Lassar's paste. This treatment has proved successful in a certain number of cases coming under his observation and for this reason he considered them of parasitic origin.

DR. PIFFARD inquired of Dr. Cutler what suggested eczema, and whether it meant the disease formerly called eczema marginatum.

DR. CUTLER replied that eczema was suggested by the rapidity with which the lesion extends; by the scaling; by the occasional itching and by the exudation which is sometimes present. He did not consider it a true case of eczema marginatum, although that is occasionally found about the genitals.

DR. FOX stated that he did not believe in the theory that parasites were the cause of the trouble in these lesions.

DR. ROBINSON stated that he believed that the vast majority of our so-called eczemas, were examples of parasitic eczema. The so-called eczematous inflammations he considers almost invariably parasitic in origin. The inflammation we have in ring-worm is just as much an eczema as any other catarrhal dermatitis. As regards this particular case before us, he said he had never seen anything like it. He considered it an eczema of parasitic origin on account of the manner in which it spreads; not a neurotic one. Eczema, in the modern significance of the term, considered as an entity, he thinks does not exist.

DR. FOX inquired whether Dr. Robinson considered the cause of this lesion to be external or internal.

DR. ROBINSON replied that he considered the cause to be external. It commenced as a small spot and increased in size by peripheral extension.

DR. PIFFARD thought that the theories expressed by Dr. Robinson were very radical, and that if they were correct we must burn our books and go back to school. Before accepting his views, however, he thought the micro-organism should be isolated, and pure "cultures" made.

DR. TAYLOR stated that in the case presented by Dr. Robinson the lesion was situated in the neighborhood of the genitals; no part of the body is more liable to infection, and he had no doubt that some form of micro-organism was the cause of the trouble. The disease called by the English erythema circinatum, and more recently described by Rosenbach as erysipeloid, is considered to be of parasitic origin. It is generally found in butchers and men who handle hides. It increases peripherally and heals in the center.

Case for Diagnosis.—DR. KLOTZ presented a woman about 26 years of age, with a single lesion on the left cheek. About four years ago a swelling appeared on the same spot and gradually increased; it was operated upon with instruments and treated with caustics and apparently healed, leaving several small depressed scars from the treatment. Last spring it began to grow again and early in August the patient applied for treatment at the German Dispensary. A sharply defined, almost circular or rather spherical tumor, about the circumference of a silver half-dollar, rises about one-six of an inch above the surrounding skin. It has the consistency of a solid piece of soft rubber and a perfectly smooth, almost shiny surface, free from any scales or crusts, causes no inconvenience, except occasionally slight itching and burning. The affection has been treated with a ten per cent. salicylated plaster, under which the swelling had steadily gone down. The lesion had also become much paler in color.

DR. JACKSON thought the lesion looked like lupus erythematosus.

DR. CUTLER said he thought it was a case of lupus, but the diagnosis must be drawn between that and morphea.

DR. KLOTZ stated that the lesion was not at all nodular. There was a central cicatricial depression which had been produced by the caustics, but the raised border and the scales or crusts peculiar to lupus erythematosus were entirely absent. He was rather inclined to consider it a peculiar form of morphea.

NEW YORK ACADEMY OF MEDICINE.

SECTION IN GENITO-URINARY SURGERY. NOVEMBER, 1891.

DR. R. W. TAYLOR, *President, in the Chair.*

A Case of Supra-Pubic Lithotomy and Nephrolithotomy in the same patient.—By DR. WILLY MEYER. The history of this case is briefly as follows:

Male, 53 years old, merchant; for several years troubled with chronic gastritis. In 1887 the patient developed symptoms of stone in the bladder. Repeated examinations with the searcher failed to locate the stone. It was afterwards found by means of a cystoscopic examination, and removed eight days later by supra-pubic lithotomy. Nearly two years later, Dr. Meyer stated, the patient again called upon him, with symptoms which lead to the diagnosis of stone in the pelvis of the left kidney, large enough to partially obstruct the upper urethral opening. Nephrotomy was performed on the patient last May, the lumbar incision being made. A large stone was found entering the ureter for some distance. The stone presented a perfect cast of the enlarged pelvis of the kidney and the upper part of the ureter. The patient made an uninterrupted recovery; he is at present in very good health and able to attend to his business. Dr. Meyer, in concluding his paper, referred to the great value of cystoscopy in obscure urinary diseases, and the liability of the incised pelvis of the kidney to heal by first intention, provided that it is carefully sewed up, and, provided also, that the urethral canal is unobstructed and ready for proper drainage. Dr. Meyer presented his patient to the members of the Section, and also exhibited to them the stones removed.

DR. MORROW stated that he desired to congratulate both the patient and the surgeon upon the exceedingly brilliant results that have been accomplished.

The Use of Nitrate of Silver in Acute Urethral Inflammation.¹—By DR. R. GUITERAS. DR. BREWER stated that as regards the treatment of gonorrhœa, he has successively passed through the stages of indifference and enthusiasm and is now in the third stage—that of despair. He has found it a very difficult disease to treat satisfactorily. The discharge ceases only to recur again after some form of excitement. The speaker said he had made many experiments with bichloride solutions with marked success, but the cure often proved incomplete. Silver nitrate certainly does exert a marked influence on urethral inflammations, especially of the deeper part of the canal. If the strong solutions used by Dr. Guiteras can be borne without irritation, they certainly should be just as beneficial in the anterior as in the posterior urethra. He doubted whether the cases had been kept under observation for a sufficient length of time to consider them as cured.

DR. MORROW stated that Dr. Guiteras had treated the subject so exhaustively in his interesting paper that the discussion was necessarily limited to the presentation of one's personal experience. He did not understand clearly from the report of the cases how often these patients presented themselves for treatment; that is, how long an interval elapsed between each visit. Dr. Morrow said that his own experience with silver nitrate in gonorrhœa had not been nearly so successful as the author's, although he has not employed it in the same way. For a long time he subjected all his cases of gonorrhœa to injections of silver nitrate, using from one-tenth

¹ Will appear in this JOURNAL.

to one-fourth of a grain: many of the cases did well, as they do after almost any injection. In chronic gonorrhoea or gleet it is his routine practice to use silver nitrate, the strength of the solution varying from one to twenty grains, according to the susceptibility of the patient, and he has always observed a temporary marked increase in the inflammatory symptoms as well as in the discharge. He was surprised to learn that such injections could be given in acute urethritis without the production of similar results. The treatment of gonorrhoea is so very unsatisfactory that we should welcome any addition to our therapeutics for its relief. As to the abortive treatment of gonorrhoea, which Dr. Guiteras had referred to as obsolete, it has recently been revived, especially by the French surgeons. Dr. Morrow's opinion is that the abortive treatment should be condemned.

DR. ALLEN stated that he regretted Dr. Guiteras did not apply his treatment to a larger number of cases, and keep them under observation for a longer period. As it is, he did not consider the results obtained as very brilliant. Without having any experience with the use of silver nitrate in acute urethritis, he wished to add his testimony to its value in the chronic forms of the disease and in gonorrhoea of the bladder.

DR. AGRAMONTE referred to the beneficial effects of silver nitrate in gonorrhoeal ophthalmia, especially in children. Experiments have shown, he said, that a one per cent. solution of silver nitrate is sufficiently strong to destroy the vitality of the gonococci, and he did not see the object of employing very strong solutions for that purpose.

DR. BROWN stated that one point of interest in Dr. Guiteras' paper was the strong solutions used, and the frequency with which they were repeated. He regretted that the discharges had not been examined for gonococci; if that had been done, the cures would probably not have been so rapid. The speaker said that he had employed the silver nitrate in two cases suffering from gleet; the urethra was first distended and peroxide of hydrogen poured in; the canal was then washed out with a solution of boric acid, and then the inflammatory patches were touched with a five per cent. silver nitrate solution, applied with an applicator. The discharge soon ceased, but there was a relapse two or three days afterwards.

DR. GUITERAS, in closing the discussion, stated that when the patients were discharged, they were recommended to use a mild injection for a few days and to return if any further trouble appeared; as none returned, he judged that they were cured. The injections were repeated every day. It is a question, he thought, whether every second day would not have been preferable. In chronic cases, the silver nitrate solution would naturally increase the severity of the inflammation, whereas in acute cases the astringent action of the drug tends to diminish it. There is a point of tolerance beyond which the patients get worse. A five or six grains solution was the average strength. He had reported on nine cases in this paper: five were cured; two were still being treated when he left the dispensary; one left before he was cured, and one grew worse. The discharge in almost all of the cases was very profuse; there was much congestion about the meatus, and he had no doubt that the gonococci were present.

Observations on the Etiology of Chancroid.—By DR. R. W. TAYLOR. Dr. Taylor stated that it is to-day generally believed that the chancreoid ulcer does not depend upon a specific virus of its own, and that while a chancroid may be and very commonly is derived from a previous chancroid,

a chancreoid bubo or a chancreoid lymphangitis, it also may originate in pus derived from irritated lesions of syphilis and from irritated simple lesions in syphilitic subjects, and from various forms of simple pus, particularly when originating in active and intensely irritated lesions. De Luca and Ducrey have each claimed that they have isolated and cultivated a microbe which is the morbid agent in the production of chancreoid, but their results are discordant and they failed to establish a clear scientific claim. The general sentiment among those who study bacteriology, Dr. Taylor said, is that the chancreoid is the production of pus which contains the staphylococcus pyogenes albus and aureus, and perhaps the streptococcus. Chancreoid is produced by pus rich in pyogenic microbes, and it is not safe to say to a man suffering from chancreoids that the woman he cohabited with undoubtedly had chancreoids. Dr. Taylor then gave the history of a number of cases coming under his observation in which chancreoids had been derived from simple purulent vaginal secretions, and others, in which the chancreoids had originated *de novo*; that is, in which they were due to some unknown source of contamination of herpetic vesicles; of chafes; abrasions or fissures.

DR. MORROW stated that it is generally admitted by all syphilographers at the present day that chancreoids may exceptionally originate from the pus of common inflammation, or from the pus of specific lesions that have been irritated, but nevertheless he thought the general proposition holds good that in the immense majority of cases a chancreoid originates from a chancreoid, or from a virulent ulcerating lymphangitis or from a virulent bubo. The cases cited by Dr. Taylor he did not consider conclusive. It is not uncommon to see lesions which in their contour and course greatly resemble chancreoids; these, as has been suggested, may depend upon a pyogenic microbe and the proclivity of certain tissues to receive it. He felt disposed to doubt the fact that these lesions may develop into chancreoids without contagion. Such ulcers may present the objective characters of chancreoids, but he would not class them as chancreoid lesions. When we think of the immense possibilities of exposure to pus in contact with women who have gonorrhœa, or leucorrhœa, with perhaps some purulent exudation from the os uteri, and from balanitis, and the few cases of chancreoid that can be traced to such exposure, the exceptions to the rule formulated by Fournier are so few that they may be disregarded. Dr. Morrow said that he thought Dr. Taylor had done a good service in bringing out the fact that chancreoids may originate from common inflammations, or from irritated specific lesions, but such cases he thought were not nearly so common as the author meant to convey.

DR. BROWN stated that he considered Dr. Taylor's paper a very valuable one. Cases had come under his observation where lesions had developed from a herpetic source, and where it was very difficult to make a correct diagnosis.

DR. GUITERAS thought that the diagnosis was too frequently made from the appearance of the ulcer, and that typical chancreoids in the male come from typical chancreoids in the female, and vice versa. Ulcerating herpetic lesions, especially in alcoholic individuals, often closely resemble chancreoids.

DR. BREWER stated that the subject of ulcerations about the genitals was still very obscure. He thought the term chancreoid should be done

away with entirely, and a generic name like septic ulcer adopted for this class of lesions. Some of them are very virulent; others only moderately so.

DR. TAYLOR, in closing the discussion, stated that he had nothing particular to add to his paper. He considered the chaneroid a hybrid, heterogeneous ulcer. Under the name of septic ulcer it might be received, although the name chaneroid had become so deeply rooted that he did not feel like advocating its annihilation.

SECTION IN GENITO-URINARY SURGERY. DEC. 10th, 1891.

DR. R. W. TAYLOR, *President, in the Chair.*

DR. SAMUEL ALEXANDER presented a specimen of a bladder taken from a man upon whom he had performed supra-pubic cystotomy for the removal of a portion of the prostate. The patient was 67 years old and had suffered for about eight years. For five years he had been unable to pass his water except by the use of the catheter. The obstruction was caused by the middle lobe of the prostate, the lateral lobes not being much enlarged. Repeated examinations of the urine failed to reveal kidney disease. The cystoscope showed that the bladder was sacculated and reticulated. The operation was performed in October at Bellevue Hospital. The third lobe of the prostate was removed and the bladder sewed up, syphon drainage being employed. The man did well for twenty-four hours after the operation, and then, without any apparent cause his pulse and temperature began to go up and he died shortly afterwards.

The Tannate of Mercury in the Treatment of Syphilis—By DR. CHAS. W. ALLEN. Dr. Allen stated that the objections to the use of the more commonly employed mercurials—such as calomel, corrosive sublimate, the proto and the biniodide were sufficiently strong to warrant the search for a better preparation. Dr. Lustgarten was rewarded in such a search by discovering the hydrargyrum oxydulatum tannicum, or tannate of mercury while working in the laboratory of Prof. Ludwig, in Vienna. The tannate is described as a dark yellowish-green powder, without taste or smell, and insoluble so long as it is not decomposed. Its simplest mode of preparation consists in precipitating a solution of nitrate of mercury by a solution of tannate of soda in slight excess.

DR. ALLEN said that his experience with the tannate in the treatment of syphilis has been rather limited, extending to probably less than fifty cases. He has come to regard it, however, as an exceedingly efficacious preparation, showing its beneficial action on syphilitic products often in a remarkably prompt manner. As to the mode of administration, the tannate may be given in its pure state, as a powder alone, or mixed with sugar or liquorice powder, or combined with a few grains of tannin. For children it can be given in milk. It can be given in one-half grain doses, three or four times a day, or as often as the symptoms require it up to the point of toleration. In conclusion, Dr. Allen stated that the tannate seemed to possess the following advantages over the prevalent mercurial preparations for internal use:—

1. That it is stable; it does not decompose, dissolve or change readily.
2. That it is quickly assimilated.
3. That a relatively large quantity of mercury can be given with safety, and a relatively large proportion is absorbed, as shown by quantitative analysis of the urine.
4. That it is not so prone to cause salivation as calomel and the protoiodide.
5. That it is not so likely

to cause diarrhœa and gastro-enteritis as the bichloride and protoiodide. 6. That it is well tolerated by children (dose one-third to two-thirds grain). 7. That being unchanged in the stomach, and only decomposed after it enters the alkaline contents of the small intestines, the stomach escapes any possible irritation.

DR. LUSTGARTEN stated that he had brought the tannate of mercury before the profession in 1884. The drug passes through the normal stomach without change, but in the duodenum, where the reaction is alkaline, it is reduced to small globules of metallic mercury, so that it can be readily absorbed—a process which he ventured to call “internal inunction.” He prescribes it in daily doses of three grains and if this is well borne it can be increased to five grains or even more. One course of treatment consists of one hundred to one hundred and fifty grains. He has never observed any bad effect on the stomach by its use. In a few cases it may produce a mild diarrhœa. Certain dietetic rules should be observed by the patient, such as the non-indulgence in beer, white wine, etc. He has never seen a case of stomatitis follow its use. He considers it especially valuable in the treatment of syphilis in children—both in the hereditary and other forms.

DR. MORROW stated that he had employed this preparation of mercury for several years; not methodically, but as a sort of substitute treatment in certain cases where the protoiodide and other preparations did not seem to agree. He has not been able to satisfy himself that the tannate is any better than the protoiodide or the other preparations that we are in the habit of using. The tannate has certain points in its favor; for example, it does not cause irritation of the intestinal canal as readily as the protoiodide, and for this reason he has frequently employed it in children with very good results.

DR. KOPLIK stated that his experience with the tannate has been limited exclusively to its use in children. He regarded it as a most valuable remedy in such cases. He has never seen a case of stomatitis or diarrhœa result from its use. He does not favor the hypodermic use of the tannate on account of the pain it causes.

DR. TAYLOR stated that years ago, when Dr. Lustgarten first introduced the drug, he had employed some of Merck's preparation, and it worked very nicely. He hardly thought that in some cases it is as efficacious as the protoiodide. He was convinced from a large experience with the use of the drug in the New York Hospital clinic that it would not do to administer the tannate in one grain doses in a routine way, and he had the pills reduced in size to half a grain. He thought the use of the insoluble preparations of mercury should be limited to the earlier stages of syphilis, and that after five or six months the soluble preparations were preferable. Dr. Taylor stated that in his atlas he ranked the tannate next to the protoiodide.

Report of a case of Diabetes Insipidus.¹—By DR. J. A. FORDYCE. Dr. Morrow stated that he had nothing to add to the very admirable account which Dr. Fordyce had given of the case. It was no less interesting than puzzling. We know that diabetes mellitus is sometimes associated with syphilis, a number of cases having been reported by Jullien in which a tumor of the fourth ventricle has been found which would account for the production of the diabetes. He thought the most remarkable feature of the

¹ Will appear in this JOURNAL.

case was the prompt and complete return of the urine to the normal specific gravity and quantity after the convulsive and paralytic attack. In ordinary diabetes or in glycosuria we have very frequently not only sensory disorders or even paralytic attacks which are rarely continuous; there is generally a return to the normal condition, but in this case it is difficult to account for the pathology of the disease or the extraordinary result.

Selections

New Observations in the Treatment of Alopecia Areata by means of Iodine in Collodium. E. CHATELAIN. (*Journ. des Mal. Cutan. et Syph.* Nov. 1891.)

The material consisted of thirty-four cases, seven females and twenty-seven males. Nine were children from five to thirteen years of age, the ages of the adults varying from sixteen to forty-eight. In twenty-four the scalp was the seat of the disease; in five the beard; in four the scalp and beard, and one case was universal. The disease had lasted in some only from one to eighteen months, in others for several years, in one for six years. In one, however, it had been present only three days. In studying the effects of the treatment, the writer excludes fifteen cases, for the reason that they were seen only once or twice. He also leaves out eight which were still under treatment and thus deals with only eleven cases, which were all treated and cured by his method, and which remained well. The same procedure was followed in everyone. The affected areas were painted with a solution of iodine in collodium (1 in 30), the application going beyond the borders of the patches. As soon as it began to be detached, in three, four or more days the coating was removed, the surface washed with a solution of bi-chloride of mercury and the collodium was reapplied. Irritation resulted from the medication, usually limited to a sensation of burning or itching, lasting for a few minutes or hours; in some instances a dermatitis was observed and in these treatment was suspended for a few days. In a few cases the cure was hastened by electricity. Chatelain believes that alopecia areata is parasitic in origin and the action of the treatment is due to the fact that the collodium excludes the air and consequently oxygen; that the solution is exciting and also acts as a parasiticide. He concludes that from the treatment uniform results are obtained—a cure of the disease; the result is not only constant but rapid, on an average the treatment lasting about six weeks. Moreover, he regards it as a prophylactic against the spread of the disease and finally as a very easy and practical therapeutic measure.

GEORGE T. ELLIOT.

The Infectious Origin of Certain Cystites, usually Ascribed to Cold, Rheumatism or Gout. P. BAZY. (*Annales des Maladies des Organes Génito-urinaires*, August, 1891.)

The author reviews the question of the infectious origin of cystitis. He begins by stating that in nearly every case of genuine cystitis, where there is undoubted evidence of a purulent inflammation, the origin may be traced to gonorrhœa, tuberculosis or direct infection by means of instru-

ments. Mechanical irritation alone, as that caused by the presence of a foreign body, new growth or obstructive disease of the urethra or prostate, cannot give rise to a suppurative inflammation.

There are, however, certain cases where a cystitis appears spontaneously without the possibility of gonorrhœa, tuberculosis or direct septic infection being present. These are usually loosely spoken of as due to "cold" or to the somewhat mysterious action of rheumatism or gout. The writer cites from such cases occurring in his own practice, which he made the subject of careful investigation.

In the first instance, a patient who had no previous disease of the genito-urinary organs, suddenly complained of symptoms of a well-marked cystitis. An examination of the urine revealed the presence of pus. An areolar abscess was found to have preceded the symptoms by two or three days. In the second case the symptoms of cystitis followed a severe bronchitis or broncho-pneumonia. The third patient had suffered just before this attack, with a purulent balanoposthitis, and the fourth first noticed the symptoms of cystitis immediately after an acute attack of tonsillitis.

As there was an acute purulent cystitis present in each instance, as no history or evidence of tubercular or gonorrhœal disease could be found, and as no urethral or bladder instruments had been employed, the author states as his belief, that the disease in each instance was caused by a direct infection of the bladder by pathogenic organisms, passing from the blood, through the renal filter, into the urine; the origin of which could be traced to the antecedent septic disease.

G. E. BREWER.

Liniment for Eczema of the Arms and Scrotum.—P. UNNA. (*Union Médicale*.)

Unna recommends for rebellious eczema of the arms and scrotum light purgatives every two to three days and the use of the following liniment:

- R: Olei Lini.
- Aq. Calcis.
- Zinc oxid. aa 25.
- Iodoform 4 to 8.
- M. Sig. External use.

GEORGE T. ELLIOT.

The Influence of Muscular Strain in the Production of Orchitis and Epididymitis. CASTRO. (*Annales des Maladies des Organes Génito-Urinaires*, August, 1891.)

In this paper the author published a short report entitled "Orchitis par effort."

He cites the case of a healthy young man, 30 years of age, who while carrying a heavy burden on his shoulder down an inclined plane suddenly slipped, and, as a result of a violent muscular effort to prevent falling, experienced a "sickening pain" in the right testicle and cord. The following day he developed a marked orchio-epididymitis with every appearance and symptom characteristic of the most acute gonorrhœal form of the disease. The symptoms slowly subsided under appropriate treatment and finally disappeared entirely. There was no history of tubercular disease and the patient had never suffered from any variety of urethritis.

In commenting upon this condition, the author states that Velpeau and

Roux admitted the possibility of this variety of epididymitis, and gave as an explanation of its occurrence, the possible contusion of the cord by violent contraction of the abdominal muscles.

Monod and Terrillon give as a frequent cause of this condition, the sudden and violent contraction of the cremaster, which draws the testicle upward against the pubis with such force as to give rise to a serious contusion of the organ, often accompanied by a rupture of the blood vessels.

In confirmation of this Terrillon reports a case of a man who, as a result of lifting a heavy bar of iron, experienced a gradually increasing pain in the left testicle, which became seriously inflamed, and was finally removed for persistent pain. Upon examination the organ was found to present the characteristic lesions of a traumatic orchitis.

The author concludes first, that in rare instances, the disease may arise wholly from injury due to muscular strain; and second, that in cases of tubercular or gonorrhœal disease muscular strain with its accompanying injury to the testicle and its appendages, frequently acts as the exciting cause of the complication.

G. E. BREWER.

Fever as a Symptom Accompanying the Eruptions in Congenital Syphilis.

DR. ERŐSS of Budapest. (*Gyógyászat*, No. 13, 1891.)

The author reports a series of observations upon five cases of newly-born infants, with inherited syphilis. The temperature of each was taken three times daily.

In every case, the occurrence of syphilitic manifestations on the skin or mucous membrane, was accompanied by a distinct rise of temperature. In only one of the case did this exceed 39° C., in the remaining four it varied between 38° C. and 39°. It was at times continuous and at other times of the intermittent type. By careful observation, he felt justified in excluding all other causes for the symptom.

In three other infants born with syphilitic manifestations already present, he noted an elevation in temperature, which occurred at the appearance of any new manifestation of the disease.

G. E. BREWER.

Extirpation of the Initial Lesion in Syphilis. DR. ED. EHLERS. A Monograph. (*Carl Peterson, Copenhagen*, 215 pp., 1891.)

The writer commences with a historic review of opinions on the destructibility of the chancre *in loco* held in antedualistic times, citing then the views of Ricord, the favorable opinions of Neisser, Diday, Hutchinson and Fournier. He adopts the metastatic doctrine of Virchow on the local nature of the syphilitic chancre. He shows that the idea of the true chancre being a sign of an already existing and generalized infection is based upon its being solitary, which supposition has been refuted by Fournier, Delange, Clerc and Tubati, and its non-inoculability upon the bearer, which again has been overthrown by the inoculations of Wallace, Tindurem, Puche, Bumm and Pontoppidan. Bumm and Pontoppidan have demonstrated that one may inoculate successfully the secretion of the primary chancre upon the bearer, even during the second incubation. There passes a time, varying from three to five weeks before the system is rendered immune against the inoculation of the secretion of a hard chancre. The results of excision of the initial sclerosis depend upon local conditions, as the seat, size, isolability and state of the inguinal ganglia. It must be easily accessible and extirpa-

tion possible without mutilation. He regards it as too uncertain and not without risk to extirpate at the same time the enlarged glands of the inguinal region, as these unfortunately nearly in every case correspond, according to Fournier and Barthélemy, to similarly enlarged glands of the iliac fossa which one must necessarily leave untouched. The writer, with Oedmansson, is of the opinion that recent glandular involvements, which are seen at the beginning and are painful, are quite frequently of non-syphilitic origin. As indeed, the chancre may be ulcerated or excoriated, which circumstance admits the possibility of a secondary infection. In the majority of cases extirpation of the chancre cannot prevent the appearance of secondary symptoms, but in all cases there has been obtained :

1. Either complete removal of the initial lesion, without local reinduration, or ;

2. A diminution of the volume of the primary sclerosis.

In accordance with the latest facts of bacteriology, demonstrating that the intensity of the infection is in proportion to the number of bacilli which invade the economy and the law of concordance of Bassereau, Langlebert and Diday, the writer concludes that such a destruction or diminution can not but render the course of the disease more benign. Excepting Fomauschewsky and Watraszewsky, all authors, who have performed excision have observed a milder course in the cases where it was done. The writer has collected 74 cases from the literature where a negative result was observed for more than a year.

In 10 per cent. of the cases the disease was barely out-lined,

" 80 " " " " " " " " " weakened,

" 10 " " " " " " " " " intense.

The intensity of the infection was classified according to the rules fixed by Diday and Jullien. Amongst all the cases published where excision was done there are but two cases, Neumann's and Keyes', where the disease ran a malignant course. The average period of incubation in chancres where excision was performed, he found to be thirty days. Out of 584 cases of excision 447 have given a negative and 137 a positive result. Of these 137, 65 were observed during a period of a year and 72 longer than a year. He concludes finally as follows :

1. Excision of the initial lesion is capable—in certain rare cases—of preventing general syphilitic infection of the system.

2. All the excisions with negative results, where it has been performed twenty-four to forty-eight hours after the appearance of the chancre, prove nothing. The object is not to extirpate as soon as possible after the appearance of the chancre, but as soon as one can after the infection. All these cases have had a period of incubation of twenty to thirty days.

3. Excision of the initial lesion, although it has not been able to prevent general infection, yet it has an attenuating influence upon the course of the disease.

4. Mercurial treatment should be instituted even if during an observation of several months, the patient does not present a secondary symptom. It is possible that the secondary symptoms may be so slight as to be overlooked.

5. Absence of reinduration of the cicatrix does not exclude the possibility of the appearance of secondary symptoms.

6. Reinduration in the cicatrix signifies a negative result, and may of itself be the sole symptom which follows.

7. Excision should be performed in as many cases as possible, without, however, promising the patient a positive result.

8. The wound left after excision heals like any simple wound, if the sclerosis has been radically removed. Hence, when a chancre of large size drags along and refuses to heal, when conditions are favorable, it should be extirpated.

F. H. PRITCHARD.

Purpura Hæmorrhagica of Cancerous Origin. ANDREA ROSSI. (*La Gazzetta degli Ospitali*, No. 56, 1891.)

The writer reports the case of a man, 50 years of age, who was suffering from cancer of obscure localization. Three days before death he presented, all over his body, and especially upon the extensor surfaces of the articulations a macular hæmorrhagic eruption of a vivid red color, in form either lenticular or arranged in large blotches, which did not disappear under pressure by the finger. The necropsy revealed primary gastro-duodenal cancer with carcinomatous infiltration of the retroperitoneal lymphatic glands. Several pieces of the skin over the elbow, where the macule were especially numerous were prepared and examined microscopically. More than a hundred sections were carefully examined, yet no red blood-corpuscles could be discovered, hence the writer regards the condition in question a hæmoglobi-næmia with consequent hæmatinorrhagia. He draws the following conclusions from the case:

1. Purpura cancerosa is not due to a true subcutaneous hæmorrhage, but a simple hæmatinorrhagia.

2. The passage of leucocytes and hæmoglobin through the vessels takes place on account of alterations in the walls of the vessels, produced as much by the denutrition of the tissues, in general, as by the virulent cause which induces hæmoglobi-næmia.

3. The coloring matter of the purpuric spots has its origin in the coloring matter of the normal blood corpuscle. This dissolving of the pigment of the blood corpuscles is caused in some manner by the malignant growth.

4. The death of this patient was due to a loss of the power of the corpuscles of taking up oxygen.

F. H. PRITCHARD.

Book Reviews.

Pathologie und Therapie der Syphilis Von DR. MORIZ KAPOSI, Professor für Dermatologie und Syphilis und Vorstand der Klinik und Abtheilung für Hautkranke an der Universität in Wien. Stuttgart, 1891; Verlag von Ferdinand Enke.

To those familiar with his works on skin disease and much more to those who have listened to his teachings and observed the masterly manner in which the results of vast experience have been utilized for purposes of instruction, the name Kaposi will be sufficient guarantee that the volume just issued contains within its covers the fruit of long and patient toil, winnowed and garnered with conscientious care.

The work before us has not been hastily written. In fact it has been expected for a long time, but its publication was delayed. The author has not been able to devote continuous time to its preparation because of other pressing duties, so that a chapter written at a time, as opportunity presented itself, has necessarily extended the completion of the book much beyond the original intention. Besides this the two parts were written with a considerable interval between, so that not so much will be found relating to the latest antiseptic methods in the surgical treatment of certain conditions such as bubo. The author also calls attention in his preface to the chapter on pigmentary syphilides, the knowledge of which has been considerably increased since this portion of the work was put into type. The reader will discover here and there other evidences that the first part was not written yesterday, but the many other indications that the volume was not written in a day will more than compensate for what may not be up to date. Again, the first part is largely historical, and as the work is essentially one on the pathology and therapy of syphilis, one might question the propriety of giving more than a passing notice to theories which in the enlightenment of the present day were so plainly erroneous, and it is surprising that some of the views held by Hunter and others as to the identity of gonorrhœa, chancre and syphilis should have prevailed long enough to warrant mention. Syphilis has to do so much with the outer surface that descriptions of the various skin lesions and the views regarding their nature and significance by one who has made so great a study of cutaneous eruptions in general, must arrest the attention of all syphilographers. Many portions of the work show the same clear cut, plain, unadorned description of lesions as characterize the author's dermatological writings and show a power not possessed by all of transmitting to the reader's mind what has presented itself to the eye of the trained observer. Some twenty pages have been allotted to the discussion of the various doctrines of unity and duality of the chancre. The author believes that induration of the sore is not essential to infection with syphilis and thus far is to be classed with the unicists, who maintain that the soft chancre is not infrequently followed by syphilis. The terms unity and duality are more or less confusing, and it would probably be better to drop them entirely. You may call Kaposi what you wish; what he believes is that there is but a single virus for syphilis, and that the chancre is a symptom of local syphilis and is not a necessary prelude to general infection. There may be no chancre or other lesion present to show where the poison entered the system, or there may be a papule, an erosion, a soft or hard sore, a bubo or an inflamed gland. These are treated of under the heading, "idiopathic manifestations of syphilis."

The papule is thought to be the form of primary lesion when the virus has been derived from the blood or secretions of secondary lesions, and this papule may be without induration. A diphtheritic ulcer or erosion, or a phagedenic sore may be followed by constitutional syphilis, and on the other hand a typically indurated sore may as a rare thing have no general symptoms in its wake. Now these views are not so widely different from those held by the great majority at the present day who might be called dualists, if anything, believing in a soft non-infecting and a hard infecting chancre and admitting the exceptions to the rule; instances of double infection, etc.

Under aetiology we find an interesting review of the microscopical and bacteriological investigations which have been made to determine the nature of the virus, from the *Vibrio lineola* of *Donné* (1837) to the bacillus of *Lustgarten* (1884). The latter discovery is discussed at some length in connection with the smegma bacillus of *Alvarez* and *Tavel*, and the observations which have since followed. Although *Dr. Lustgarten's* work was entirely his own, carried out in *Weigert's* laboratory, portions of it were conducted in *Kaposi's* service and under his own eyes, and from his personal, independent observations on the bacillus he has no hesitancy in joining with those who regard it as probable that in this bacillus the bearer of the syphilitic virus has been found. The chapters on abortive treatment, excision of the chancre, etc., are of much interest at the present time when the subject has been revived in several quarters and such opposite opinions are held by equally competent observers as to the value of excision. From the standpoint held by the author, the abortive treatment is feasible, and general infection may be prevented by early excision.

The chronological division of the stages of syphilis so long in vogue has been omitted and other terms have been substituted. Thus we read of the eruption period, the latent period and the relapsing period, and as before mentioned, if the primary lesion exists it is called idiopathic syphilis. Two chromo-lithographs are found in the back of the book, one in illustration of the *Lustgarten* bacillus, but if the explanation of the seven figures of the plate exist, I was unable to find it. In the text are eleven wood cuts, mostly of histological subjects. Eighty of the five hundred pages are devoted to treatment, many formulæ are given, and the tannate, among other of the newer preparations is well spoken of. The exact place which the injection treatment should occupy has not yet been determined, and the conservatism of the writer is quite as pronounced in the chapter on therapy as in some others. Syphilis of the mouth, nerve syphilis, and syphilis of internal organs all make interesting and instructive reading, and throughout the clear style and grace of diction add much to the pleasure of the seeker after truths. C. W. A.

A Manual of Venereal Diseases. Being an Epitome of the most approved Treatment. By *Everett M. Culver, A.M., M.D.*, Pathologist and Assistant Surgeon, Manhattan Hospital of New York City and *James R. Hayden, M.D.*, Chief of Clinic Venereal Department of Vanderbilt Clinic, College of Physicians and Surgeons, New York. With illustrations. Philadelphia: Lea Brothers & Co., 1891.

In this little volume the authors have undertaken to present in a condensed form a working knowledge of Venereal Diseases. Designed as a manual for students or physicians only the practical aspects of these affections have been considered. The first part devoted to gonorrhœa and chancreoid is the work of *Dr. Culver*; the second part relating to syphilis, comprising considerably less than one-half of the book, is by *Dr. Hayden*.

The authors have done their work in a most creditable manner, with an intelligent recognition of the needs of the student. It is singularly free from the objections of superficiality and incompleteness which apply to most works of this class. The subject matter is rendered more attractive by the exceedingly tasteful and handsome dress in which the publishers have presented it. The typography, paper and press work are of superior quality.

Books and Journals Received.

We have received the August, September and October numbers of Woods valuable publication of Medical and Surgical Monographs.

The August number contains monographs on Modern Abdominal Surgery, by Sir T. Spencer Wells; Subjective Noises in the Head and Ears, their Etiology Diagnosis and Treatment by H. McNaughton Jones, M.D.; Notes on surgery for Nurses by Joseph Bell, M.D.; Surgical Treatment of Typhilitis by Frederick Treves, F.R.C.S.

The September number contains Food and Dietaries, A Manual of Clinical Dietetics, by R. M. Burnet, M.D.; Stertor, Apoplexy and the Management of the Apoplectic State, by Robert L. Bowles, M.D. Index to Vol. XI.

The October number contains Treatment of the Diseases of Women, by Thure Brandt; The Modern Treatment of the Morphine Habit by Dr. A. Fromme; A contribution to the study of the so-called Scarlatina Puerperalis, by Prof. Dr. Renvers; The Influence of Alcohol upon the organism of the Child, a Pharmacological Clinical Study, by Prof. J. Demme; The Diseases of Development, by Dr. J. Comby.

CYTANEOUS TUBERCULOSIS—Its Clinical Aspects and Etiological Relations, by James C. White, M.D.; Its Pathology, by John T. Bowen, M.D.; Its Treatment by George Henry Fox, M.D.

A contribution to the study of Pre-Columbian Syphilis in America, by J. Nevins Hyde, M.D.; Tuberculosis and Leprosy in Japan; A Study in Ethnological Pathology, by Albert S. Ashmead, M.D.; Disturbances which may follow instrumentation upon the Male Urethra and Bladder, by Paul Thorndike, M.D.; Supposed Curative Effects of Operations *per se*, by J. William White, M.D.; The Ocular and Tactile Demonstration of Urethral Lesions by the aid of new instruments, by F. Tilden Brown, A.M., M.D.; The Surgical Treatment of Movable Kidney, with report of four Nephrorrhaphies, by A. J. McCosh, M.D.; Polypus of the Male Urethra, by Hermann Goldenberg, M.D.; Polypus of the Male Urethra, by Hermann Goldenberg, M.D.; Epécystié Surgical Fistula for Cystoscopic Exploration. Intravesical Treatment and Drainage, by John S. Davis, M.D.; Notes on Aristol by Wendell C. Phillips, M.D.; Notes on the Effects of the Aniline Dyes, especially the Blue Pyoktanin in the Treatment of Inoperable Malignant Growths, by Willy Meyer, M.D.; Bald Heads, by Albert E. Carver, M.D.; Pemphigus Neuroticus Traumaticus, by D. W. Montgomery, M.D.

Die Primäre Urogenital tuberculose des Mannes und Weibes von Prof. Hjalmar Heiberg; Mikroskopische Untersuchungen über Acute Dermatitis, von Dr. Louis Heitzmann; Mikroskopische Untersuchungen über die Chronische Plastische Dermatitis, von Dr. Louis Heitzmann; Die Behandlung der Syphilis, Dr. Anton Elsenberg of Warschau; Saggio di una Nuova Classificazione delle Maladie Cutanee proposta dal Prof. P. Tommasoli; Sulla meningite nella Sebbra E Nella Sifilide. Del P. Tommasoli; Contributo alla cura dell'uretrite di una Nuova Chirurgia da Unguenti per la cura dell'uretrite anteriore acuta e Subacuta, dell Prof. P. Tommasoli.

Endoskopische Beiträge Zur Lehre von der Gonorrhoe des Weibes, von Prof. Dr. Victor Janovsky; Aphorismen zur Behandlung der Syphilis, von Prof. H. Kobner of Berlin; Die Bedeutung der special kliniken für Dermatologie und Syphilidologie an den Prussischen universitäten und ihre vorge-schichte, von Prof. H. Kobner, Berlin.

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Original Communications.

MOLLUSCUM CONTAGIOSUM.

BY

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Toronto, Can.

THERE are few diseases about which greater difference of opinion have been expressed than Molluscum Contagiosum. With regard to its contagious character Bateman, T. Fox, Duckworth, Fagge, Hutchinson and Crocker have believed it to be communicable whereas Hebra, Wilson and Kaposi have expressed a contrary opinion. Some American dermatologists influenced perhaps by the German School in former years declared it to be non-contagious. Latterly, Allen, Stelwagon, Robinson, and others have given expression to the opposite view.

The point of commencement of the disease has also been a fruitful source of discussion. Wilson, Hebra, Kaposi, T. Fox and Hutchinson described it as commencing in the sebaceous follicles. On the other hand Virchow, Retzius, Crocker and Thin have held the opinion that the process began in the rete-mucosum in the hair follicle. Again Lukomski, A. B. Morison, Caspary, Neisser and Geber believe it to commence in the rete on the surface of the skin. As to the duration of the disease Hutchinson has stated that in six or eight months it will disappear spontaneously whereas Kaposi asserts that it may extend over months and even years.

At the last meeting of the Congress in 1888 a paper was read upon this subject by Dr. Stelwagon. Since that time a number of cases have occurred in the Toronto Infant Home, which presented many points of interest particularly with reference to contagion.

My reasons for bringing forward this subject at the present time is partly to corroborate Dr. Stelwagon's views as to the communicability of the disease and partly to present the results of investigations recently made by Dr. Macallum, of the Toronto University Laboratory into the nature of the molluscum bodies.

The Infant's Home is an institution in which babies are taken at the earliest ages and usually kept until they are from two to five years of age when they are either adopted into families or sent to Homes for larger children.

In June '88 a child, Mary Williams, was brought into the Home, who was noticed to have small warty growths on the face and neck. During the first three months, until the first of October the child was in the Infirmary. She with several others was then sent to one of the large nurseries which accommodates about twenty children and which is generally fully occupied.

Some of the children who were brought into the nursery with Mary Williams afterwards suffered from Molluscum. In December of that year five months after this patient had entered the Home and two months after she was brought into the nursery four inmates of the latter were found to be affected. Of these one was brought into the nursery with Mary Williams. The other three had been there previous to the introduction of the affected child.

During this time the tumors upon the neck and face of the first child increased in number and size. Many became sessile and presented a dark bluish appearance.

A diagnosis was then made by Dr. W. B. Nesbitt, the attending physician and the cases were immediately put under treatment. The growths were removed by excision.

From that time until the present the disease has existed in that nursery. The matron who was careful to excise the tumors as they showed themselves was on several occasions disappointed by the reappearance of the disease when she thought she had entirely got rid of it.

Three children are at present suffering from it. In July of this year all the tumors which could be found were removed and preserved for microscopical examination.

Fifteen children in all have been affected, ten males and five females.

The tumors occurred principally on the neck and face, occasionally on the chest, and one boy had several on the groin. One girl had two on the back of the hand and one or two on the leg. Although the disease has now existed over three years

in the Home it has never extended beyond the nursery in which the affected child was placed. There are five nurseries in the Home, each of which accommodates about fifteen children.

There is very little communication between the various nurseries. The children are rarely together and never in close contact. This may account for the confinement of the affection to the one nursery. The disease as a general rule has not returned when all the tumors were removed. The first patient has been in the nursery ever since the tumors were removed, now over two years and a half and the disease has not returned. In only three cases has there been any return. The children affected were all in a fair state of health and did not seem to be influenced by the presence of the disease. None of them suffered at any time from ordinary warts. One was a negro and another an Indian half-breed. This is of interest in connection with Mr. Hutchinson's expressed doubt as to whether the disease ever occurred in the dark races.

A few children in the same nursery have been exposed to the affection for two or more years and have not contracted it. In this connection, however, it is only fair to say that the tumors have been removed as soon as they appeared so that there has been little opportunity for the spread of the infection, and this fact might also to some extent account for its not returning in those who had been already affected.

The contagious nature of the disease was denied by Hebra and as late as 1887 Kaposi was still of the opinion that it was not communicable (*Vierteljahreschrift für Dem. and Syph.* 1887).

Other German authorities as Caspary and Neisser have given expression to opposite views as well as many English and American dermatologists. Its contagious character may then be said to be fairly established.

It is, of course, not easy to exclude every source of error in the clinical history of a number of cases, but in my opinion it would be difficult to account for the facts just given upon any other theory than that of contagion.

The Home was a comparatively new building. The disease had never previously been noticed in it and there was the distinct history of the introduction of the affection in the person of Mary Williams. Then the outbreak of the disease took place in the nursery where this patient was placed; and at the same time there was complete immunity of children in other parts of the Home.

This would seem to prove that the disease is contagious but

that it requires close and intimate contact to further its spread.

Successful inoculations of the disease are reported to have been made by Patterson, Retzius and Vidal.

Dr. Patterson, according to Dr. Duckworth, succeeded in three or four instances. The contents of tumors were inserted in the nodules of follicles in a tender part of the skin.

Dr. Allen in a letter from Paris to the *Journal of Cutaneous and Venereal Diseases*, mentions a successful cure by M. Pantry.

It must, however, be stated that in the great majority of instances attempts at inoculation have completely failed. My friend Dr. Shaw made several attempts to thus reproduce the disease but was not successful.

He made four experiments. The first was made with a pure culture of a micrococcus of which I shall afterwards speak. The surface of the side of a rabbit was shaved and slight abrasions were made with a sterilized needle and the abraded surface inoculated. Result *nil*.

The second trial was made with a guinea pig. The material used was the broken down contents of a molluscum tumor. No result.

The third was made on himself with the pure culture of micrococci. Also with no result.

In the fourth a subcutaneous injection was made in the lip of a rabbit with a pure milk culture of the micrococcus. This was followed by no result save the production of a nodule which soon passed away.

On four different occasions, all due precaution having been taken, cultures were made from the contents of molluscum tumors, with the result that the same micrococcus was obtained each time.

This organism grows only at the temperature of the body, stains well with methylene-blue-carbolic fuchsin and with Gram's method, but does not stain by Neelson's method. On Agar it grows as a round pure white colony with a glistening surface. It does not spread much over the surface.

Under the microscope 80 diameters it presents a yellowish white tinge, a finely granular dome shaped colony with smooth edges.

It grows well on potato as a pure white colony.

In milk which is neutral or slightly alkaline the germ produces after three days an acid fermentation. The milk divides into two layers, an upper clear fluid and a lower white coagulum.

In bouillon after three days there is a slight haziness throughout the tube and no growth is seen on the surface or at the bottom.

Controls were used throughout.

On the third occasion the contents of the molluscum wart were allowed to dry in a sterilized tube for a week and then broken down by a sterilized forceps and spread on the surface of Agar with like results.

In the fourth experiment extreme care was taken in the sterilization of the skin as well as of the instruments used. Cultivation resulted in the isolation of the same micrococcus.

No other organisms were found in any of the experiments except the first when sufficient precautions had not been taken.

The tissue of the tumors was stained by Gram's method but no positive results were obtained. Certain spore like bodies were seen but these might not have been the same organisms.

It would appear that so far as these investigations go a micrococcus is invariably found in the molluscum growth, but owing to the fact that no definite results have yet been obtained by inoculation, great doubt must be entertained as to whether the organism is the cause of the disease or not.

At the London International Congress in 1881, Angelenci reported finding a similar micrococcus, but the evidence brought forward did not seem sufficient to convince the members of the Congress.

THE HISTOLOGY OF MOLLUSCUM CONTAGIOSUM.

BY

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THE material for the study of this subject came from the cases under Dr. J. E. Graham's observation. This, immediately on removal from the patients, was hardened either in alcohol or in a saturated solution of corrosive sublimate. The specimens, stained *in toto* with Delafield's hæmatoxylin and eosin, were imbedded by the chloroform process in paraffin, sectioned to the thickness of 5μ , the sections fixed in series on the slide by the clove oil-collodion mixture, and mounted in benzole-balsam.

Other methods of observation, as will appear from the following pages, have been also employed.

There are two questions of interest which, as the result of my studies on this material, I feel called on to discuss here. These are the point of origin of the abnormal growth and the origin and nature of the structures which are generally known as the "molluscum corpuscles." I cannot undertake to determine anything concerning the etiology of the disease although what is stated further on may more or less affect the views already current as to its cause.

The Place of Origin.—As to the point of origin of the growth the views of the various observers do not coincide. The earliest observations in regard to this were made by Bateman,¹ who was the first to give the disease the name it now bears and who considered it derived from the sebaceous glands. This view was adopted by Willis² and Wilson³ who regarded the molluscum corpuscles as sebaceous cells. The same view as to the point of origin has been advocated more recently by Hebra,⁴ Hutchinson⁵ T. and T. C. Fox,⁶ Startin⁷ and Kaposi.⁸ On the other hand the abnormal growth is considered by Lukomsky,⁹ R. B. Morison,¹⁰ Caspary,¹¹ Neisser,¹² and Geber¹³ to originate in the stratum mucosum of the epidermis and by Virchow,¹⁴ Crocker¹⁵ and Thin¹⁶ to arise in the hair follicles.

It would seem that the supposedly fatty composition of the molluscum corpuscles is responsible for a large part of the support given to the view that the growth originates in the sebaceous follicles. Wilson thought indeed that the corpuscles were sebaceous, and even as late as 1879, T. and T. C. Fox described them as cells filled with altered sebum. This view can not be endorsed by any one who has used osmic acid in the preparation of the corpuscles.

Whether the molluscum growths ever do originate in hair

¹ Delineations of Skin Diseases, London, 1817.

² Illustrations of Cutaneous Diseases, London, 1841.

³ Diseases of the Skin, London, 1842, p. 341.

⁴ On Diseases of the Skin, New Sydenham Series, p. 135.

⁵ Lectures on Clinical Surgery, I, p. 1, London, 1878.

⁶ Transactions of Path. Soc., London, xxv, p. 460.

⁷ Transactions of Path. Soc., London, xxvi, p. 341.

⁸ Vierteljahresschrift für Derm. und Syph., 1877, p. 333; also: Pathologie und Therapie der Hautkrankheiten, Dritte Aufl., 1877 (abstract in Neisser's Article).

⁹ Virchow's Arch., Bd. lxy, p. 145.

¹⁰ Transactions Path. Soc., London, xxxii, p. 245.

¹¹ Vierteljahresschrift für Derm. und Syph., 1882, p. 205.

¹² Monatsheft, für Prakt. Derm., 1882, p. 17, also Vierteljahresschrift, für Derm. und Syph., 1888, p. 553.

¹³ Ziemssen's Handbook of Skin Diseases, Am. Ed., 1885, p. 621.

¹⁴ Virchow's, Arch., Bd. xxxiii, p. 144.

¹⁵ Transactions of the Path. Soc., London, xxxii, p. 254.

¹⁶ Transactions of the Path. Soc., London, xxxii, p. 257.

follicles or in sebaceous glands, cannot be determined from my preparations. In all these the stratum mucosum of the epidermis is the part which has given origin to the growth. In Fig. 1 the growth is shown in its commencement. Here the lowermost epidermal cells have increased in number and a small prominence is thereby produced which pushes in the upper portions of the loose corium. Such downgrowths of the epidermis can be found in the molluscum area, but very rarely beyond it, and all stages of transition are observable between these and the mature or fully developed growth. In consequence of the downgrowth of the stratum mucosum, the plane of cornification and degeneration of the cells extends correspondingly lower also, and we see frequently at the same spot a more or less concentric lamination of the cells somewhat resembling a cell nest of epithelioma. A later stage of the growth is represented in Fig. 2, where the granular and cornifying strata are shown dipping down in correspondence with the stratum mucosum. In yet later stages the corneous material may form a column and simulate a hair shaft, or, when it has fallen out of the preparation, the epithelial downgrowth with its central cavity may resemble a gland duct. Such stages have doubtless been seen by others and they may have given rise to the conclusion that the molluscum growth originates in hair follicles or in sebaceous glands. A stage in which the full development of the growth is present is illustrated in Fig. 3, and here the origin from the stratum mucosum is clearly shown. It will be observed that the layer of eleidin (*el*) is continued directly from the healthy skin on one side through the molluscum growth and parallel with the lower periphery of the same, to the healthy skin on the other side. If now one examines the epithelial cells of the molluscum growth other than those infected with the developing or adult molluscum corpuscles, one finds a repetition of the changes which the cells of the healthy epidermis undergo as they are pushed outward: increase in the cell protoplasm, diminution of the nuclear chromatin, the formation of eleidin and the disappearance of the nucleus. The prickles are not as fully formed as in the healthy cells, while the quantity of eleidin is greater.

The Origin and Nature of the Molluscum Corpuscles.—As already stated the earliest view expressed as to the nature of the Molluscum corpuscles was that they were either fat globules or cells infiltrated with fat. According to Virchow¹

¹ *Loc. cit.*

they are epidermic elements which have undergone a special form of degeneration. He also was the first to call attention to the resemblance which they present to psorospermia and he expressed the view that these bodies are the bearers of the contagion. Klebs¹ regarded them as elements foreign to the body, *i. e.*, parasitic. In the opinion of Bizzozero and Manfredi² they are of albuminoid composition and formed through metamorphosis of the cell protoplasm.

Bollinger³ expressed the view that these elements are gregarinae or permanent amoeba and like those occurring in the epithelioma contagiosum on the combs and wattles of the domestic fowls. This view is more fully elaborated by Neisser⁴ who considers them to be coccidia. According to this observer the lowermost epithelial cells are free from them while in the next zone some of the cells contain clear spots looking like vacuoles, usually in the immediate vicinity of the nucleus and pushing in its adjacent wall, the nucleus becoming thereby demilune in shape. Between the cells occur small bright spherules. Both the intracellular vacuole-like elements and the extra-cellular spherules are in teased out preparations, small oval corpuscles pointed at both ends and provided with a small round nucleus. These corpuscles become changed gradually into the molluscum corpuscles as they pass with the degenerating epithelial cells outward. With this change occurs increase in size, the nucleus of each of the affected cells is pushed to one side, flattened and is readily demonstrable even in the fully developed corpuscles. These are constituted of a semi-opaque, finely granular mass surrounded by a narrow zone of transparent protoplasm which represents the remains of the enclosing cell. In the granular masses the granules are in high magnification found to be short rodlet-like elements which, in a more advanced stage of development, group themselves into oval, cloudy, granular masses separated from one another by clear spaces and intervals. The oval masses numbering 6, 8, 10 and more, at a later stage become sharply contoured, refracting elements which form the greater part of the body of the now mature molluscum corpuscles. The nucleus of the cell has nothing to do with the formation of these elements. The

¹ Handbuch der Path. Anat., Berlin, 1868, Lieferung L., p. 53.

² Arch. per le scienze Med. 1, 1870; Arch. für Derm. and Syph., 1871, p. 509; Arch. per le scienze Med. 1, 1876. Their views are quoted and adopted by Perls, Allgem. Path. Anat., Stuttgart, 1877.

³ Vierteljahresschrift für Derm. and Syph., 1879, p. 152.

⁴ *Loc. Cit.*



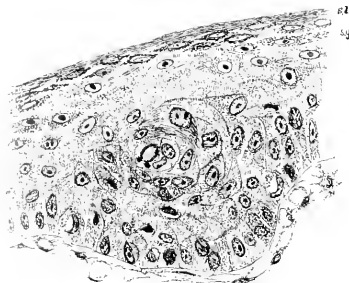


Fig. 1.

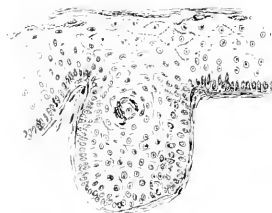


Fig. 2.

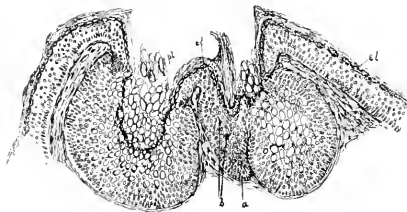


Fig. 3.



Fig. 4.

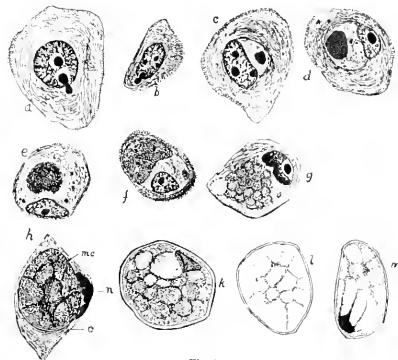


Fig. 5.



Fig. 6.

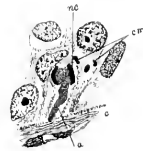


Fig. 7.

latter, considered by Neisser to be the spores of the parasite, vary in size and, through pressure, in form also.

Furthermore, Neisser saw in some of the largest molluscum corpuscles a number of transparent oval bodies pointed at both ends, each provided with a central, semi-opaque, sharply contoured nucleus, and these he regards as belonging to a later stage in the development of the spores and similar to those found in the lowermost layers of the affected epithelium.

Neisser did not succeed in determining the development of these elements outside the body. The only positive result which he obtained was that the corpuscles filled with spore-like bodies became, in the moist chamber, larger than they were at first. He thinks that the tough, horny membrane surrounding the spores is the cause of their non-development.

Caspary¹ whose article on this subject appeared after Neisser's first paper, rejects the view that the corpuscles are parasitic, but what they really are he is unable to say, although he seems disposed to regard them as products of degeneration, not, however, of amyloid nature.

Having now outlined the more prominent views as to the nature of the molluscum corpuscles I will describe my own observations. It may be well to state at the outset here, that in the following paper I have thought it advisable to limit the use of the phrase "molluscum corpuscles" to the peculiar body inside of the epithelial cell. There can be no doubt about the history of the visible features of these cells. As it is only in imperfect preparations that the peculiar intracellular element is confused with the cell itself, it is not strict language to include under the head of this phrase cellular structures which are not at all peculiar to molluscum. The term "corpuscles," therefore, should be strictly applied to the elements in question only while the term molluscum cell should be given to those cells only which contain them.

The first trace of the corpuscle is usually seen in the cells of the third or fourth layer of the epithelium of the molluscum. Here it appears as a small spherule measuring in its extreme limits 2μ in diameter. It is usually, though not always, in that part of the cell directed toward the opening of the molluscum. The cell protoplasm in its immediate neighborhood, exhibits an arrangement which is easily recognizable in moderate magnification and which serves to demonstrate clearly this early stage. This arrangement is shown in Fig. 4 *a*, and Fig. 5, and consists in a

¹ *Loc. Cit.*

condensation of the cytoplasmic fibrillæ at a certain distance from the corpuscle in a zone about the latter. This zone of condensed cytoplasm may, and usually does, touch on the extremities of a more or less flattened nucleus, so that sometimes the substance of the latter has frequently, at first sight, the appearance of having shrunken, leaving one half of the nuclear cavity unoccupied except by a nucleolar body and a few fibrillæ. The zone of condensed cytoplasm is, with high powers (apochromatic immersions), readily seen to consist of fibrillæ which have apparently been pushed outwards from the nucleus towards the cell periphery. Inside of this condensed line the protoplasm is scanty, the cytoplasmic fibrillæ being excessively delicate and often so arranged that they give the appearance of granules only. Near the centre of this enclosed space is the molluscan corpuscle and at its side are frequently one or more round empty cavities. There is very rarely more than one molluscan corpuscle in a cell and it consists in the stage described, of a homogeneous, eosinophilous substance, exactly like that forming the plasmodesmata of the nuclei of the same cells. There is sometimes on its periphery a condensation of granular material which does not stain nearly as deeply with eosin.

Now this stage of the corpuscle can be found to be connected by transition forms with others which are larger and which show a finely granular composition (Fig. 5 *a-f*). Rarely a corpuscle, as large as that shown in Fig. 5 *d*, may retain somewhat of its homogeneous character and then it may manifest a slight affinity for hæmatoxylin (Delatfield's), the resulting stain from the use of this reagent and of eosin being light violet. In this granular stage the peripheral condensation of the cytoplasmic fibrillæ may be as distinct as it is in the earlier stage, or the peripheral cytoplasm may take a granular appearance. In the next stage the granular degeneration is more advanced, (Fig. 5 *e* and *f*), the granular element being as intensely stained as the originally homogeneous body. There are sometimes, (Fig. 5 *f*), a few granules larger than the rest. The increase in size continues, but now occurs a change in which the corpuscle is, as a rule, less sharply distinguishable in its outlines from the surrounding cytoplasm. This consists in the formation out of the stainable granules of a coarse reticulum (Fig. 5 *g*), the spaces of which are usually round. The whole corpuscle may at this stage have a sharp outline but more frequently the trabeculae of the reticulum may penetrate the cytoplasm, while the peripheral spaces (Fig. 4 *h*) are indistinguishable from the

cytoplasmic area. The cell body has become somewhat enlarged, the nucleus occupies usually the lower extreme part of the cell and it may be flattened, of demilune shape (Fig. 5 *h*), or it may exhibit a condition resembling chromatolysis (Fig. 4 *c*).

The enlargement of the corpuscle results, apparently, in a still further condensation of a portion of the peripheral cytoplasm. Evidence of such is best seen in Fig. 5 *g*, representing a cell, on one side of which the cytoplasmic fibrillæ can be still seen arranged in a more or less parallel fashion, while on the other the cytoplasm is so condensed as to give with the cell wall the appearance of a doubly contoured membrane. Examples of such a membrane are readily recognizable in the more advanced forms (Figs. 4 *f* and *g*, 5 *k*, *l*, *m*). Sometimes the corpuscle appears only sharply marked off from the cell contents which have not undergone the condensation to the full extent. In such cases the nucleus, shrunken or flattened, uniformly stained, is pushed to one side of the cell, while in others it may be included in the substance of the corpuscle. In forms like this the spaces of the meshwork have become very much larger, the granules constituting it coarser, and the spaces of the meshwork are sometimes ordinary vacuoles (Fig. 5 *k*), though usually they are occupied by a feebly staining material in which are present a few very fine granules.

In the later stages the granules become apparently dissolved to a great extent and the network formed of them becomes fainter, or very few of its trabeculae may remain in the centre of the corpuscle to give the appearance of segmentation (Fig. 4 *g*), but even these finally disappear when the cell passes beyond the eleidin layer. The corpuscle now stains homogeneously with hæmatoxylin, eosin or safranin. The nucleus has disappeared and the manner of its disappearance can be seen from an examination of such a stage as Fig. 5 *m* represents. It is here very irregular in outline and processes arising from it are continuous with the trabeculae of the granular network. The part of the corpuscle adjacent to it may acquire at this time a violet color when stained with hæmatoxylin and when the nucleus is no longer visible—which is the case in the molluscum cells above the eleidin layer—the whole stains blueish-violet with hæmatoxylin; in other words, the chromatin of the nucleus has become dissolved in the corpuscle and all that is left of the original cell apart from the substance of the corpuscle is the doubly contoured membrane.

It is thus seen that a body, which at first is not larger than a nuclear plasmosoma, gradually increases in size as the cell is pushed outward, until, finally, it includes the contents of the nucleus and the major part of the cytoplasm. This body is homogeneous till it has attained nearly the same size as the nucleus, when the eosinophilous substance precipitates in the form of granules arranged in a reticulum, the spaces of which enlarge as the corpuscle enlarges. Further, when the boundaries of the corpuscle touch on the extreme cell periphery, the granules again become gradually dissolved and in the stratum corresponding to the stratum corneum of healthy epidermis the nucleus dissolves, the granules all but disappear, the whole corpuscle now bounded by a doubly contoured membrane stains fairly uniformly with hamatoxylin, eosin and deeply so with safranin. The corpuscle finally includes the contents of the cell, the only structural part of which remaining is the doubly contoured membrane.

The question now to be answered is: What are the corpuscles? Neisser, as already stated, regarded them as coccidia. I cannot endorse this view. I have not succeeded in finding any of the elements which that observer has described as transparent, oval bodies pointed at both ends and provided with a centrally placed, sharply contoured nucleus, in any part of my preparations. I have seen nothing in the interior of the corpuscles which I can regard as a spore. I have occasionally observed specimens like that represented in Fig. 5 Z, in which the granules appeared at one focal plane as if gathered in a number of separate masses, but when the tube of the microscope was raised or lowered the masses of granules resolved themselves into the nodal points of a coarse network. I have never found the first stage of the corpuscle outside of an epithelial cell, although I have examined carefully with apochromatic immersion objectives, nearly a thousand sections of specimens of molluscum. This fact alone is enough to show that whatever the corpuscle is, it is genetically connected with the structure of the molluscum cells.

Conclusions.—The conclusion to which my studies have led me is that the earliest stage of the molluscum corpuscle is merely an extruded or migrated plasmosoma.¹ Such a migra

¹ I use this term to designate the eosinophilous nucleoli. It was first brought into use by Ogata (Arch. für Anat. und Phys., Phys. Abth., 1883, p. 413), who employed it to distinguish the so-designated structures from other nucleoli, (karyosomata), which stain with hamatoxylin.

tion is shown in Fig. 5 *a* and *b*. Dumbbell forms like this are not rare although one should not expect, in view of the comparatively few examples of the very youngest stage of the corpuscle, to observe such frequently in the position shown in the figure. Such cases admit only of the interpretation given. On the other hand plasmomata are, not infrequently, driven by the knife from the nucleus and an example of this is drawn in Fig. 4 *b*. Such cases can be readily determined, for the nuclear membrane is more or less torn, the nuclear substance is more or less displaced, while the cytoplasm does not show any arrangement which would follow on an *intra vitam* extrusion or migration of a nuclear body. That the corpuscle in its earliest stage is derived from the nucleus is shown by the fact that the cytoplasm is driven outwards from the nucleus and by the fact also that it is always at first in the immediate neighborhood of the nucleus.

I regard such migrating elements as true plasmomata and not as nuclear parasites for the reason that they correspond in size and staining reaction with the nuclear plasmomata which in the lowermost epithelial cells, vary in number from one to seven or eight and which are frequently of amoeboid shape (Fig. 6). If they are parasitic elements they would not undergo the degenerative changes—and degenerative changes they undoubtedly are—which result in the production of the typical molluscum corpuscle. It is remarkable that masses of reserve chromatin, like plasmomata, should exhibit amoeboid movement. I have frequently observed such a migration from the nuclei of epitheliomatous cells and I was inclined to regard such migrating plasmosoma-like bodies as elements endowed with separate life *i. e.*, as parasites. Ogata¹ has described the migration of plasmomata from the nuclei of the pancreatic cells in amphibia. My own studies² on the pancreas of larval *Amblystomata* and of *Diemyctylus* confirms Ogata's. I have also recently observed that migration of the plasmomata from the nucleus is comparatively common in the hepatic cells of larval *Amblystomata*. Facts like these show that one cannot postulate a separate vitality for protoplasmic masses just because they exhibit movement. Bütschli has shown, moreover, that drops of old oil when placed in certain conditions exhibit amoeboid movement.

Some observers consider the corpuscles to be formed of

¹ *Loc. Cit.*

² Transactions Can. Inst., Vol. I., Part 2, p. 267.

amyloid material. The mahogany-brown color which they give with iodine is the ground of support for this view. They do not give a blue, violet, or purple color when treated with iodine and sulphuric acid, but neither have many specimens of undoubtedly amyloid deposit in other organs in the hands of competent investigators. Some, again, have denied the existence of amyloid in the corpuscles. In order to determine whether amyloid is present in these, I proceeded in the following fashion: Sections of an alcohol hardened example of molluscum were, after staining with iodine, left for twenty-four hours in dilute sulphuric acid (concentrated acid eight parts, distilled water 100), in a glass watch which was placed under a cover to protect it from dust. This method employed on sections of other amyloid organs gave without fail a blue, violet or purple color in the amyloid deposit. The sulphuric acid in such preparations slowly concentrates and the reaction comes out after three or four days. Now in sections from molluscum such a mode of treatment causes a complete disappearance of the mahogany brown color from the corpuscles, a result, in my experience, not obtainable with true amyloid which is very tenacious of the brown reaction under similar conditions.

In such sections it was difficult to preserve the oldest molluscum corpuscles situated above the eleidin layer and, as the chemical properties of these became a matter of question, I resorted to another method to determine their composition. For this purpose the corpuscles constituting the "plug" of a large molluscum were teased out on a slide in a drop of iodine and after a cover was laid on, a drop of dilute sulphuric acid was allowed to run under it. This preparation and others made like it, contained at the end of twenty-four hours, groups of molluscum corpuscles stained dark brown, or brownish black. There were at points also in some of these preparations a dark brown granular material which in two or three days became opaque and even black. This reaction as well as that obtained in the groups of corpuscles I, at first, erroneously considered to be due to amyloid, because I found in many of the preparations dark blue material which I think now was starch, probably rubbed into the mollusca in some way during the toilet of the patient, and I naturally connected, in my mind, the dark brown and dark blue material as stages in the evolution of the amyloid. The dark brown reaction of the corpuscles is, however, an indication of the presence of keratin and of the substance, eleidin, convertible into keratin, for these react thus under the cover glass with iodine

and sulphuric acid and the reaction is readily given in a section of normal skin containing abundance of eleidin, or in sections of epithelioma in which cornified material is abundant. In such mounted preparations the cornified material and eleidin granules retain to the last their deep brown stain, while the other elements fade away to a pale yellow color in about two weeks. Now in sections of mollusca, similarly treated, the brown reaction of the corpuscles in and below the eleidin layer fades somewhat rapidly, while it is retained for an indefinite time and even deepened in the eleidin and in the molluscum corpuscle above this. As there is comparatively little or no keratin found between the old corpuscles it is to be inferred that the latter have taken up the keratin as it is formed out of the eleidin and have even absorbed the eleidin before it is converted into keratin. This furnishes apparently a partial explanation for the fact that these same corpuscles manifest a strong affinity for hamatoxylin, eosin, and safranin, all of which specially color eleidin material.

Among other points, which support the view that the old molluscum corpuscles absorb eleidin and keratin, may be mentioned the iron reaction. Eleidin I have found to be a derivative of chromatin and like chromatin¹ contains iron. Now the molluscum corpuscles below and in the eleidin layer contain but a small quantity of iron while those above the eleidin layer give a marked iron reaction with my methods. As little or no iron compound exists in the material surrounding these corpuscles it is obvious that the iron-holding eleidin as it is passed outwards with them is taken up by the latter. Of course, not all of the iron in the corpuscle is due to the eleidin, for, as I have pointed out in a foregoing paragraph, the corpuscles above the eleidin layer may take up in their substance the chromatin of the disintegrated nuclei of the molluscum cells and some of the iron in the old corpuscles must, therefore, be due to the chromatin diffused through them from this source.

It would seem to follow from these observations that structures in which chromatin, eleidin, and keratin are deposited must be at the outset passive or dead material. That they are themselves elements affected with degeneration, follows from the description I have given of their origin.

Why there should be a migration or extrusion of plasmosomata from the epithelial nuclei I do not know. As the plas-

¹ Macallum, "On the demonstration of the presence of iron in chromatin by microchemical methods"—*Proceedings, Roy. Soc.*, Vol. 50, p. 277.

mosomata are composed of modified chromatin I am inclined to consider the phenomenon as in some way connected with an abundance of chromatin which must be present to account for the hyperplasia of the stratum mucosum of the large molluscum growths. This abundance of chromatin would account, also, for the very large quantity of eleidin produced in the otherwise unaffected cells of the molluscum. In accordance with Klebs' views the condition is that of *hyperchromatosis* and the molluscum would, therefore, be classed as a neoplasm. Examples of mitosis are not, however, as abundant as in epithelioma, although much more numerous than in healthy epidermis.

I wish, finally, to call attention to structures which are in no way related to, or connected with molluscum corpuscles. I have seen but few of these and only in the preparations from one specimen of molluscum. They are, in such, found in those parts of the growth from which molluscum corpuscles are absent (Fig. 3 *b*). They are of amorphous or irregular form and composed of a homogeneous eosinophilous substance. The majority of them are present in the central (older) epidermal cells, but they are also found in the lowermost cells of the stratum mucosum and one of these is represented in Fig. 7 *a* as migrating from a disintegrated epithelial nucleus. I have observed similar structures in epitheliomata. What they are I am unable to say.

EXPLANATION OF FIGURES.

(All the drawings were made with an Abbe camera lucida.)

Fig. 1 represents the epidermis at the point of origin of a molluscum growth. Here the lowermost epithelial cells have, by their increased proliferation, caused a descent of the plane of cornification, resulting in the formation of a "nest"-like arrangement of a portion of the cells—*s*l., stratum lucidum; *sg*., stratum granulosum. Alcohol preparation—x 600.

Fig. 2 represents a later stage in the development of the molluscum than that shown in Fig. 1. In this case the cells of the "nest"-like group contain eleidin granules. Alcohol preparation—x 250.

Fig. 3 shows the relations of the fully developed molluscum. The layer of eleidin granules (*el*.) is continued from the normal epidermis through the growth; *pl*., a mass of degenerated epithelial cells and molluscum corpuscles; *a*, an epithelial downgrowth comparable to those seen in Figs. 1 and 2, and containing, *b*, plasmodial-like elements. In all the sections of the series from which this drawing was made there was no trace of a hair shaft or follicle. Corrosive sublimate preparation—x 81.

Fig. 4, a portion of Fig. 3, more highly magnified, the part drawn representing a central section of the left-hand molluscum depression of the same figure. *Cor*, the corium; *a*, a molluscum corpuscle in one of its early

est stages ; *b*, a nuclear plasmosoma, probably driven by the sectioning knife out of the nuclear cavity ; *c*, a chromatolysed nucleus in the same cell with a coarsely reticulated molluscum corpuscle *b*, *d*, a coarsely granuled molluscum corpuscle *e*, the same but intermediate in characters and development between *a* and *d* ; *f*, a coarsely reticulated molluscum corpuscle in an epithelial cell whose nucleus is pushed to one side ; *g*, a fully formed molluscum corpuscle with the eosinophilous substance arranged in a thread-like manner through it. Corrosive sublimate preparation— $\times 600$.

Fig. 5 represents the origin and development of the molluscum corpuscles in the epithelial cells. In *a* and *b* they are observed as plasmosomata passing out from the nuclei, and in *c*—*k* the changes are shown in them which are described in the text ; *m* *c*, molluscum corpuscle ; *n*, nucleus ; *c*, cell protoplasm. In *m* is shown the disintegration of the nucleus. Corrosive sublimate preparation— $\times 1,200$.

Fig. 6. Three nuclei of the lowermost epithelial cells of a molluscum, with plasmosomata exhibiting amoeboid shapes. Corrosive sublimate— $\times 1,200$.

Fig. 7. Drawn from the epithelial downgrowth *b* of a section of the same series as that shown in Fig. 3—*c*, corium ; *a*, plasmodium-like amoeboid mass, evidently fixed in the act of migrating from a nuclear cavity, the chromatin of which, *n* *c* and *c* *m*, is still recognizable as masses of varying size. Corrosive sublimate preparation— $\times 1,200$.

NOTES ON THE SURGERY OF THE PROSTATE (1)

BY

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THE following clinical notes are based upon the observations furnished by the accompanying cases. They are presented with the belief that bladder surgery, particularly in the past six years, suggests these principles :

First.—That a large per cent. of cases of prostatic cystitis which are not susceptible of relief by the well-known methods of palliative treatment can be more or less permanently relieved by surgical interference.

Second.—That perineal and supra-pubic incision are the two methods best calculated to accomplish the results sought.

Third.—That neither one of these operations is suitable in all cases and that both may sometimes be required.

Fourth.—That the objects of a radical operation should be the removal of the mechanical obstruction to urination, and to secure drainage and rest for the bladder.

Statistics thus far show that partial or complete restoration

(1) Read September 24th, 1891, at the fifth annual meeting of the American Association of Andrology and Syphilography, at Washington, D. C.

of bladder function has followed in over two-thirds of the reported cases of removal of mechanical obstructions caused by prostatic growths, and seem to furnish occasion for careful study of all cases of prostatic enlargement accompanied by the usual symptoms, with a view to determining what cases are amenable to surgical relief, and what are the best means of solving the mechanical problems involved.

It is scarcely necessary to refer to the fact that at the time many prostatics apply for treatment, the mechanical obstruction is by no means the most serious condition present. Resultant renal disease, loss of muscular power and thickening and diminution in size of the bladder, render more or less futile both palliative and radical efforts at relief in such cases. Temporary drainage and rest are obviously the chief advantages to be gained where degeneration of its walls has destroyed the bladder's contractile power, and in such cases the removal of mechanical obstructions is of benefit chiefly in facilitating the use of the catheter and removing causes of bladder irritation.

Case No. 5 in the following list illustrates this fact. After removal of an anterior horse-shoe-hypertrophy at the vesical orifice and a demonstration both by digital examination at the time of operation and inspection of the inside of the bladder with the cystoscope passed through the perineal wound three weeks after operation, it was shown that there was no intra-vesical obstruction remaining, yet voluntary urination was not restored. The work of Belfield, McGill, and others, may, however, fairly be claimed to have demonstrated the possibility of more or less complete restoration of bladder function in a large per cent. of cases formerly condemned to the catheter, and to have proven the fallacy of previously entertained views as to the pathology in a majority of these cases. Dr. Belfield, (who performed the first supra-pubic operation for removal of prostatic obstruction,) shows by statistics that in the majority of instances "the failure to evacuate the bladder is due in no wise to degeneration of the vesical muscles, but solely to the mechanical obstruction offered by prostatic growths," also that the enlargement of the prostate commonly regarded as "senile" hypertrophy is not limited to advanced life, and that the obstruction is usually of such form as to admit of removal.

McGill's statement that "prostatic enlargements which give rise to symptoms are intra-vesical," does not appear to hold good in all instances. Undoubtedly this is very generally correct, but it is certainly also true that in cases with hypertro-

phied tissue projecting into the prostatic canal such enlargement may not only be the cause of urethral and vesical irritation, but also interfere seriously with the introduction of instruments. This was shown in No. 4 of the following series. It also seems quite reasonable that the great size the rectal tumor sometimes attains may be the cause of irritation of the bladder and prostatic urethra in the absence of distinct intra-vesical growths, particularly where there is co-existing constipation of the bowels. The amount of residual urine, and bladder urethral irritation occasionally produced by a mass of hardened feces in the rectum, in the absence of prostatic or other disease, is indicative of the possibilities of a constantly present rectal mass, such as is so often found where there is general prostatic enlargement. Clinical evidence, however, indicates that the intra-vesical growths have been present in almost all cases operated upon and that such growths, usually by their modification of the contour of the distended bladder and mechanical interference with perfect emptying of the same, are the chief cause of the symptoms which we usually meet.

Digital and ocular examination seem necessary to the determination of the condition of the inside of the bladder, whatever method of operation is decided upon. If it is possible to determine beforehand which operation, perineal or supra-pubic, will afford an opportunity to best examine the inside of the bladder, we have gone far toward securing the data necessary to the selection of the form of operation best suited to individual cases. In trying to determine beforehand we have no means of securing positive evidence, but there is already accumulated sufficient experience to afford valuable indications in the selection of the operation probably best suited to individual cases.

First.—It appears in the very valuable collection of one hundred and thirty-three cases by Dr. Belfield¹ of operations upon the enlarged prostate, that the perineal operation is safer than the supra-pubic. The rate of mortality by the supra-pubic incision is 16 per cent. and by the perineal 9 per cent.

Second.—Inability to reach and explore the bladder by a perineal opening is said to exist in 30 per cent. of all cases.²

Third.—Where it is possible to reach and explore the bladder by perineal incision, it is generally not possible to do so with the same thoroughness as by a supra-pubic incision.

Fourth.—Where there is an elongated prostatic urethra, it

¹ See American Journal of the Medical Sciences, Nov. 1890.

² McGill, Watson.

is generally associated with a rectal tumor of large size, and the increased length of the prostatic urethra and the consequent increased perineal distance is approximately indicated by this fact, and by measuring the distance with a catheter from the meatus to the point where urine is obtained. A large rectal tumor was accompanied by an elongated prostatic urethra in all of the following cases.

With a greater degree of safety by the perineal method, it seems generally desirable to give it the preference in cases where there is not a large rectal tumor and probable elongation of the prostatic urethra, with the expectation of being able by over-stretching the prostatic canal to make digital exploration of the bladder, and to remove or divide obstructing growths with scissors, knife or cautery. In five of this series of cases, viz., Nos. 1, 3, 6, 10, and 12 there was not a large rectal mass and it was possible to explore the bladder with the finger, and to inspect it and the prostatic canal quite well through the large tube which was used. In one of the remaining seven cases the perineal operation was preferred, because the bladder could be made to hold but two ounces. In two, a supra-pubic and a perineal opening was made. In one of these two a perineal opening first made failed to afford access to the obstructing intra-vesical growths and the upper opening was consequently made. In the other one of these two cases a supra-pubic opening was made and intra-vesical growths removed, but inaccessible urethral obstruction being felt, an opening was made below. In the remaining cases the high operation would have been preferable, but a perineal opening was made either because the condition of the patient imperatively required the least possible surgical injury, or for other reasons stated. Perineal opening afforded sufficient access to secure division of the so-called prostatic bars and collar shaped growths, and moderate sized projecting masses either by the scissors, knife or cautery in the five cases referred to. It is generally necessary to remove the projecting divided ends in these cases to secure perfect patency of the vesical orifice. The writer has not met with any distinct pedunculated middle lobe growths in the cases operated upon, but found one several years ago in a post-mortem upon a patient where no operation had been made. A perineal opening would have afforded good opportunity for its removal. It has, in those where this method seemed applicable, afforded easy access to other forms of hypertrophy, such as prostatic rings, bars, almond and other shaped growths at the vesical

orifice, and ridge and nodular formed tissue in the prostatic canal.

In four cases marked diminution in the size of the rectal tumor has followed puncturing the lateral lobes with a small curved galvano-cautery point. The latter was used through a Ferguson's rectal tube introduced through the perineal opening, and inspection was aided by reflected light from a head mirror. The punctures were made to the depth of one-half to three-quarters of an inch and from two to six in number. Definite location of the desired point of insertion of the cautery may be obtained by digital and ocular examination. A small straight tenaculum passed along the finger secures the objective point, and the tube then passed into the wound over the tenaculum, the secured mass can be more fully exposed by being drawn into the mouth of the tube. In the cases thus treated no ill ef-



fect has been observed. Prolonged drainage was used and the small resultant slough occasioned no inconvenience.

How much of the diminution in size of the rectal mass was due to the removal of congestion by rest secured by drainage, it is difficult to estimate. The tube usually employed at the time of operation was three-quarters of an inch in diameter and four inches in length. Smaller tubes of similar shape have been used in two instances in the removal of slight hypertrophies discovered in the prostatic canal after drainage had been continued for several days. Cocaine anaesthesia was employed in these two cases.

The use of the cautery in this manner would seem to be restricted to small salient growths, and to a limited extent in the reduction of general enlargement of the lateral lobes by puncture.

It seems quite as feasible as its somewhat similar use in the removal of nasal growths. The cautery is more easily and definitely manipulated than the knife or scissors in the removal of almost all growths about the vesical orifice through a perineal

opening. More experience in its use may extend the limits of its application, but it does not appear suited to growths of large size. In these cases it has fortunately occurred that no growths of considerable size were met with at the vesical orifice, and probably the cautery would have proven inadequate to their removal had they been found. It is manifestly not equal to other methods at the surgeon's disposal in operating through a supra-pubic opening.

The violent inflammation attending its too free use in the removal of nasal hypertrophies, would appear to suggest its limitations in prostatic surgery.

The method employed in the following cases to secure final closure of the wound after drainage by the perineal opening, has made it possible to use a tube almost indefinitely. Prolonged drainage was used in several of them, and in numerous instances following perineal operations for other causes. It has been maintained without reference to the possible formation of a permanent fistula, and this objectionable sequel has not occurred in a single instance. In a patient suffering from a tubercular pyelitis and cystitis a fistula persisted for some weeks, but finally closed. In this case the perineum had formerly been honeycombed by fistulous tracts following perineal abscesses. No openings were present at the time of the operation, but the amount of cicatricial tissue following their former existence, made it probable one might remain after prolonged use of a tube. In No. 1 of this table a catheter was used eighty-one days, and in No. 9 for ninety-two days.

Closure of the opening was secured by thoroughly curetting the granulating channel and removing all cicatricial tissue at its external orifice. Stitches were inserted where the orifice was large. Cocaine anesthesia was used. A dry absorbent dressing was applied, and the urine drawn by catheter for three or four days. The use of a steel sound in the urethra facilitates the operation and makes it easy to locate the urethral end of the tract. In addition to small curettes, a dental burr of large size insures perfect denudation.

A brief summary indicates that where death followed perineal incision the danger would not have been lessened had the supra-pubic opening been employed. One died from immediate shock and one from uræmia ten days after operation. In one where combined incision was made, death was from shock. In these three cases death would have occurred in a short time from existing pathological conditions had no effort at surgical relief

been made. The presence of stone in case No. 7 did not seem to be an influence in the result. Rectal distention with a six ounce bag was attended by pronounced arterial depression and respiratory disturbance. In two other patients where the writer did supra-pubic cystotomy for causes other than enlarged prostate, the use of the rectal bag had to be discontinued as in case No. 7, because of the shock it produced. In case No. 5 the fatal termination from renal disease was five and one-half weeks after, and not due to the operation.

Residual urine was present in varying quantities in the cases operated upon. Its amount was greater where there was a large rectal tumor present. It was not found after recovery in but two instances, viz.: Nos. 8 and 9, and then in small quantity. However, all were not subsequently examined to determine the amount of residual urine present after recovery. In No. 9, relief seems chiefly due to removal of stone, but the enlarged prostate had undoubtedly favored the formation of stone. The average age of the patients was sixty-two and one half years and but three were under sixty-five.

TABULATED LIST OF CASES.

No. 1, Mr. W. K., age 65. Bladder symptoms for two years. Wholly dependent on catheter for past two months. Catheter used every hour or every two hours. Very slight enlargement shown by rectal examination. Prostatic bar divided by perineal incision December 31, 1889. Drainage used eighty-one days because of recurrence of pain on temporary removal of tube. Recovery with restoration of bladder function. Now almost two years since operation and no return of symptoms. Urinates naturally once in three to five hours in day time and does not have to empty the bladder at night.

No. 2, Mr. L., age 80. Cystitis of several years standing, now violent in character. Rectal tumor quite large. Patient's general condition bad. Perineal operation January 15, 1890. Bar divided. Bladder difficult to reach. Death on third day. Never fully rallied. (Post mortem showed much such a specimen as Plate No. 1 [in *Operative Treatment of the Enlarged Prostate*, by Watson].)

No. 3, Mr. —, age 70. Severe cystitis from gonorrhœa of six months standing accompanied by prostatic obstruction. Bladder would hold but a small quantity of urine, a part of which was expelled every ten to twenty minutes. Rectal tumor small. Perineal operation and prostatic collar divided April 29, 1891. Drainage fifty days through perineal tube. Recovery. Bladder now empties itself completely, but patient has to urinate every two or three hours.

No. 4, Mr. J. S., age 74. Complete retention. Catheterization now impossible. Rectal tumor of large size. Perineal opening made May 14, 1890, and drainage until May 26, 1890, when a supra-pubic opening was done, owing to extreme length of prostatic urethra and inability to complete operation by perineal opening. Pear shaped hypertrophy found on examination through supra-pubic opening. V shaped piece removed with scissors. Ridge like and nodular hypertrophies felt through perineal opening in prostatic urethra, obstructing access to the bladder, were removed by galvano-cautery through a small cylindrical rectal speculum. Caustery punctures also made into lateral lobes. Prostatic urethra of large size, seemingly dilated by intra-urethral growths. Recovery with complete restoration of bladder function. Now sixteen months since operation. No return of symptoms.

No. 5, Mr. J. B., age 68. Wholly dependent upon catheter for ten months preceding operation. Cystitis well marked. Rectal tumor of large size. Operation by perineal incision June 12, 1890. (Patient preferred perineal operation.) An anterior horse-shoe-hypertrophy about the size of a small almond was found at the vesical orifice, and removed by the use of a hook shaped galvano-cautery knife through a cylindrical rectal speculum. The aperture through the tube used was three-fourths of an inch in diameter. Recovery but without restoration of bladder function. By digital examination at the time of operation and by inspection with the cystoscope three weeks later, it was shown that all intra-vesical obstructions had been removed. Patient improved for about one month after operation, when symptoms of uræmic poisoning supervened, and he died one week later, having been semi-comatose for two or three days preceding death.

No. 6, Mr. T. N., age 58. Cystitis had existed for one year previous to operation. Urination was very difficult and painful. Rectal tumor of medium size. There was in this case co-existing stricture of the membranous urethra, of small caliber, necessitating perineal section. Operation, May 28, 1890, by perineal incision. A prostatic collar with small opening at the vesical orifice was divided, and the retracted ends nipped off with scissors. Recovery with perfect restoration of bladder function. At this date—fifteen months after operation—there has been no return of symptoms.

No. 7, Mr. A. B., age 70. Cystitis severe. Patient has been wholly dependent upon catheter for several months. Rectal tumor of large size. Exploration of bladder with sound revealed a stone. Operation, November 28, 1890, by combined supra-pubic and perineal incision. On examination through the supra-pubic opening a conical shaped mass was found projecting into the bladder. V shaped section removed with scissors.

also a soft stone removed, size of a small walnut. Inaccessible urethral obstruction being felt a perineal opening was also made. Use of rectal bag was accompanied by arterial depression and respiratory disturbance. Death thirty-six hours later. Patient never fully rallied.

No. 8, Mr. A. A., age 69. Cystitis for two years. Urination now almost impossible. Use of catheter very difficult. Rectal tumor of large size. Operation January 21, 1891, by perineal incision. Prostatic collar divided and retracted ends burned off with the galvano-cautery. Several cautery punctures were made into the hypertrophied lateral lobes through the prostatic urethra. Recovery with almost complete restoration of bladder function. The supra-pubic operation was advised in this case, but declined by patient. The perineal distance was great, and it was with difficulty that the finger could be passed into the bladder.

No. 9, Mr. I. S., age 71. Five years previous dependence upon the catheter. Its use now necessary every hour. Cystitis severe. Rectal tumor of large size. Bladder capacity about two ounces. Large soft stone present. Operation, March 20, 1890, for stone only, by perineal incision. After removal of stone by crushing through the perineal opening an anterior-horse-shoe-hypertrophy could be felt at the vesical orifice, but no attempt was made at its removal, because of the length of time already consumed in removing the stone and the patient's failing condition. This hypertrophy was purposely caught in the jaws of the lithotrite and crushed. It was impossible to pass the finger into the bladder, owing to the great perineal distance. Operation upon the prostate was deferred indefinitely. Patient subsequently declined to have it done owing to improvement following operation for stone. Thirteen months later the stone having reformed, another operation was done for its removal by perineal incision, and at the same sitting finding the perineal distance greatly diminished and being able to pass the finger into the bladder, there was removed with the galvano-cautery as much of the growth at the vesical orifice as could be reached. More of this growth was subsequently burned off through a tube, and punctures made into the lateral lobes. Drainage used ninety-two days after last operation. Restoration of bladder function followed the first operation, but more or less cystitis remained. After second operation same result followed. Removal of the stone is to be largely credited for relief obtained. The supra-pubic operation would have been desirable in this case, but for the extreme smallness of the bladder.

No. 10, Mr. T. D., age 48. Slight cystitis and irritation of the membranous and prostatic urethra had existed for three or four years. There was a complication of deep urethral stricture

of medium calibre. Rectal tumor small. Prostatic collar and stricture divided January 3, 1891 by perineal incision. Recovery with great improvement.

No. 11, Mr. L. C. S., age 71. Cystitis for one year. Quite severe for past three months. Patient's general condition very bad. Rectal tumor large. Operation by perineal incision June 16, 1891. A half almond shaped hypertrophy was removed from the vesical orifice by the scissors. Perineal distance long but finger could be passed into the bladder by a little effort. Patient died ten days later of uræmia. Supra-public operation would have been better in this case, but owing to the patient's objections and my belief that the perineal was somewhat safer, the latter was done.

No. 12, Mr., B. age 48. Bladder symptoms two years. Two or three recent attacks of retention. Rectal tumor of small size. There were co-existing strictures of the deep urethra and a small encysted stone at the vesical orifice. Operation by perineal incision September 12, 1891. Strictures and prostatic collar divided and stone removed. Patient thus far doing well.

NOTE.—Feb. 18, 1892. Since this paper was read the writer removed (on Oct. 13, 1891), a right lobe in a patient aged seventy (Mr. F.), and both right and left lobes in Case No. 9 of the above table by a median perineal incision. A superficial incision was made with a knife, dividing the mucous membrane covering the lateral lobes in the prostatic urethra and the glandular tissue was removed piecemeal by digging it out with the finger. Counter pressure was used by inserting the two first fingers of the left hand into the rectum. Immediate and marked diminution in size of the rectal tumor was observed. In the case Mr. F. restoration of bladder function followed when the tube was removed five or six weeks after the operation. He had been wholly dependent on catheter for six months. In case No. 9 the perineal opening was made to remove soft stone which had reformed. In view of the experience afforded by the case of Mr. F., operated upon ten days before, an effort was made to remove both lateral lobes and was accomplished in the same way as in Mr. F.'s case. Case No. 9 did well for a time, but began to lose appetite and to have a slight temperature one month since and continued to decline until one week since, when he died. Death occurred three and one-half months after the operation and the post mortem showed a suppurative pyelitis, and there were three small soft stones in the bladder. The removal of the lateral lobes through the medio-lateral or medio-bilateral opening has not heretofore been attempted so far as the writer is aware. It involves some danger of impairing the integrity of the prostatic urethra but possesses the advantage over Dittler's operation of giving access to the bladder for drainage and removal of growths about the vesical orifice and also gives good opportunity to remove the lateral growths. They cannot be removed whole, but can be enucleated in pieces with the finger. It seems evident that no method yet devised offers the advantages afforded by supra public opening in the great majority of cases.

AN ANTISEPTIC HYPODERMIC SYRINGE WITH AUTOMATIC
LUBRICATING PISTON¹

BY

JOHN BLAKE WHITE, M.D., NEW YORK.

Physician to Charity Hospital, etc.

THE sure and economic method of acquiring the effects of remedial agents by hypodermic medication has grown very steadily and justly into favor since the practice was first introduced by Dr. Alexander Wood, of Edinburgh. Numerous imperfections about the means employed have been fully recognized, but little if any attempt has been hitherto made to remedy the defects. Meantime, the great science of bacteriology has made in its marvelous advance peremptory demand for the institution of proper safeguards around the direct introduction of agents into the blood by subcutaneous injection.

Every one interested in antiseptic medication will doubtless appreciate the value of the improved hypodermic syringe which I have the pleasure to exhibit to you to-day.

The advantages of importance which are claimed for this over other instruments of its kind will be manifest at a glance.

An elaborate description of the syringe will be hardly necessary at this time but I would like to call your attention to some features of practical value about the instrument which cannot fail to commend themselves to you. The most striking peculiarity about the instrument consists in its having two chambers or barrels, arranged and adapted in capacity to each other so that the fluid drawn up into the syringe proper, *a*, for hypodermic use, does not enter the suction barrel, *b*, or come in contact with the piston and become liable to contamination.

The two barrels are distinctly separated by the very neat interposition of what may be described as a purifying chamber, *a*, attached to which is a new and convenient form of stop cock, *c*.

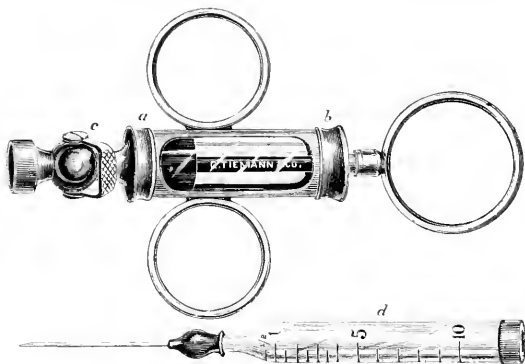
Through the antiseptic chamber, *a*, all air concerned in the

¹ Read before the American Association of Andrology and Syphilology. Second Triennial Meeting. Congress of American Physicians and Surgeons, Washington, D.C., September 22d-25th, 1891.

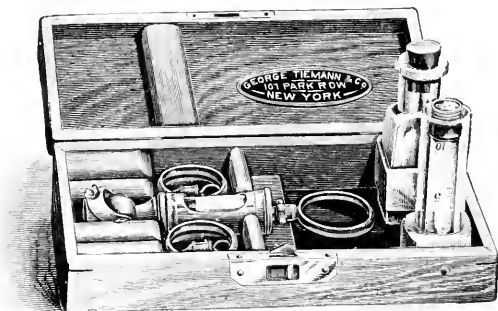
NOTE.—The manuscript of this article has been in the editor's hands since Oct., 1891. Its publication has been unavoidably delayed.

mechanical working of the syringe is forced to pass a minute filter, which is always kept impregnated with one of the several recognized and effective antiseptics.

The piston is cylindrical in form, filled with carbolized olive



oil, having one or two small apertures at its junction with the valve which is kept constantly lubricated. The lubricating fluid need not be replenished oftener than once in three or four



months and is introduced into the piston by unscrewing the handle.

The lower barrel of the syringe, *d*, can be readily detached

from the rest of the instrument for the purpose of cleansing it and is of too great importance ever to be omitted. I have constantly used this syringe for all hypodermic and intrapulmonary injections, and have never seen the slightest inflammation follow.

The second illustration represents the conveniences about the case, in which the syringe is contained. The case is made of oak and may be kept thoroughly aseptic. A bottle neatly fitted into a place designed for its reception is intended to hold my gold and manganese fluid, and a small glass cylinder is added to facilitate the preparation of the liquid for hypodermic administration. The construction of both instrument and case reflects great credit upon the makers, Messrs. George Tiemann & Co., 107 Park Row, who have put my designs so faithfully into execution.

1013 Madison Avenue.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

211TH REGULAR MEETING.

In the absence of the President, Dr. A. R. ROBINSON was elected to fill the Chair for the evening.

Lichen Planus, Followed by Generalized Exfoliative Dermatitis:—
Presented by DR. JACKSON in behalf of DR. FOX.

A young man of 19 years presented a general eruption of lichen planus. The eruption had gradually involved the entire skin except the face and a few islands upon neck and bend of elbows; the palms and soles were slightly affected. There had been considerable venous congestion, giving to the skin a purplish dusky appearance, and recently a general exfoliation had taken place.

DR. LUSTGARTEN said the case presented a clinical picture of pityriasis rubra.

DR. ALLEN had seen such eruptions following the internal use of quinine and also, in a very susceptible subject, the application of mustard.

DR. MORROW had seen a number of cases of generalized exfoliative dermatitis following psoriasis, and could see no reason why there could not be a transition of lichen planus in the same manner as in the case of psoriasis. At present, the clinical aspects of the case suggest nothing but dermatitis exfoliativa.

DR. JACKSON said that when the patient came under his observation three weeks ago, he had undoubted patches of lichen planus, made up of flattened papules with the characteristic color. The generalized dermatitis

has developed since that time. At present there are a few fairly typical papules of lichen planus on the foreskin.

Nævus Mollusciformis of the Left Side of Face and Neck Combined with Xanthoma:—Presented by DR. KLÖTZ.

The patient, a tailoress, 22 years of age, a native of Galizia, cannot give any definite history of the affection. The nævus occupies the left side of the face and in the shape of several peculiarly formed stripes the left side of the neck. Its surface is smooth, under a normal epidermis whitish soft nodules of different shapes, forming patches of various size, are seen. On some portions of the neck a number of small tumors like in mollusum fibrosum are observed; a papillomatous or verrucous condition is entirely absent. The affection has recently extended as the patient says, on the cheek and temple, a patch on the left upper eyelid has also appeared more recently. In these patches the white soft nodules are more separate, closely resembling some forms of xanthoma.

DR. LUSTGARTEN looked upon the disease as a nævus: he did not see any evidence of xanthoma.

DR. ALLEN thought the eruption about the eye had the appearance of xanthoma; on the neck, where it changes into a warty growth, he would consider it a nævus.

DR. BULKLEY remarked that xanthoma was usually a symmetrical disease, especially when it occurred about the eyes. He regarded the case reported as an example of the so-called nerve nævus, and the eruption about the eye as an extension of that upon the neck.

DR. CUTLER recalled the case of nerve nævus which he had presented to the Society in which the growth had exactly followed the course of the great sciatic nerve and its branches, as far as the great toe.

DR. MORROW was disposed to eliminate xanthoma from the diagnosis, as he did not think we had any history of a case of xanthoma terminating by such insensible gradations into a nævus. He regarded the eruption as a nævus unius lateris.

DR. TAYLOR made the same diagnosis, and remarked that in this case the hypertrophy was confined to the epidermis.

The whole process in these nævi was easy to trace; a hyperplastic disturbance of the skin sometimes affecting the epidermis and sometimes the whole derma.

DR. KLÖTZ had thought of a combination with xanthoma, because it was very unusual for a nævus to extend at so late a time. He had seen the patient once about a year ago, and was certain that the growth had extended somewhat since that time.

He called attention to the perfect smooth surface of the epidermis, and to the close resemblance of some of the more recent patches to xanthoma.

[The patient has since reported that her mother tells her that when about six years old, she had inflammation of the brain, and that only since then the nævus began to develop.]

DR. TAYLOR said that vascular nævi sometimes increase to an enormous extent. Years ago he had a child under observation who had a patch involving half of the scalp. It extended over the face. The child finally died of septic poisoning from fissures about the mouth.

DR. MORROW recalled two cases of naevi in which extension of the growth took place. One was a case of naevus of the hairy scalp which extended over the forehead; the other a naevus of the chin in a patient aged 26 in whom the growth extended over the clavicle, the shoulder and down the arm.

Morphœa with Nodular Growth:—Presented by DR. MORROW.

MARY R. —*Aet* 52, was bitten by a dog at seat of present lesion when 5 years old. Eighteen months ago noticed skin a little rough and harsh at site of present indurated patch. About one year ago patch became whiter than surrounding skin. No pain or numbness has been present. Two months ago a red tubercle appeared which at present is about $\frac{1}{4}$ inch in diameter, circular in outline and elevated above the surface of the white patch.

At present there is a linear scar extending from the junction of ramus and body of left side of Inferior Maxillary bone about one and one-half inches. Directly below that is situated an indurated patch irregularly circular in outline and about size of silver dollar and perfectly white, surrounded by a pinkish or violet zone of capillaries. In the center of this patch was a hard prominently raised nodule which in appearance and feel suggested an epithelioma.

DR. BULKLEY looked upon the case as one of localized scleroderma, with secondary development of epithelioma.

DR. ALLEN thought the diagnosis would rest between scleroderma and epithelioma.

DR. LUSTGARTEN missed some of the characteristic features of localized scleroderma. He thought the hard infiltration would prove to be a cancer *en cuirasse*, and the outgrowth on the surface a medullary cancer.

DR. FORDYCE remarked that by daylight the patch presented every appearance of morphœa; its color was dead white, and it was surrounded by a zone of minute dilated vessels. He hoped to have an opportunity to confirm this view by a microscopic examination.

DR. MORROW said that many cases of localized scleroderma were on record which followed injuries. The injury in this case was received in childhood, however, while the patient was now quite advanced in years. He objected to Dr. Lustgarten's diagnosis, on the ground of the locality, and the course and development of the growth. He recalled a case illustrated in Dr. Jamieson's work on Diseases of the Skin of scleroderma of the scalp which was characterized by one or two nodular formations that had been mistaken for epithelioma. Crocker records the presence of nodules in connection with localized scleroderma which broke down and became ulcerated. They were excised and examined and found to possess none of the characteristics of epithelioma. The assumption was that these nodules only occurred when scleroderma developed in structures situated directly over a bony base.

DR. BULKLEY had seen a similar case on the scalp which was regarded by some of the members of this Society as identical with Jamieson's case. It proved to be a sarcoma.

Case for Diagnosis:—Presented by DR. SHERWELL.

Girl, aged six years. Born in this country of American parents. First came to clinic October 29, 1891. The mother first noticed the present lesion

on foot about two and one-half years since ; was about the same in extent, not quite so much induration as now, and the nodosities of surface and irregular thickening were not present. About a year ago the lesion on the fourth toe commenced, and it has gradually increased to its present size. It has also grown harder. It is somewhat painful on walking ; there are no other subjective symptoms.

The lesion as now present consists of a plaque of a cartilaginous hardness, studded here and there by tubercular nodosities, about six in number, and the whole occupying about one-third of the external plantar surface of left foot.

The skin and subcutaneous cellular tissue are all involved in the process ; still the plaque can be moved relatively freely over the subjacent tissues. The epithelial layers, while somewhat thicker and horny, present no other unusual features. There are few subjective symptoms while the foot is at rest, but on account of the hardness it is difficult to walk upon, seeming to act as a foreign body, without the irritation the latter would cause. The little patient always walks upon the ball of that foot.

The lesion on the fourth toe is of the same relatively painless character and is curiously clubbed on top, and the psallicar cartilage-like feel is also present. On no other part of the limbs or body is anything that is abnormal. The child is of healthy parents as far as can be ascertained, and is also a healthy child. I cannot class the trouble as scleroderma or carcinoma *en cutis*, and present her for diagnosis.

DR. BULKLEY regarded the affection as a diffuse syphilide ; it resembled a case under his care which was rapidly disappearing under specific treatment.

Case for Diagnosis:—Presented by DR. JACKSON in behalf of DR. FOX. The patient, aged 30, presented an eruption of varioliform lesions between the scapulae, of two weeks standing. A study of the lesions of different size showed that a rounded vesicle first formed which became depressed in the center, and covered by a small yellow crust. Meanwhile the annular margin became raised and of a dark red hue, and finally a large blood-colored crust formed. The lesions were aggregated in two groups over the spine.

DR. KLOTZ said the eruption had the appearance of a herpes zoster.

DR. LUSTGARTEN considered the affection an acne varioliformis, with some unusual features. He did not find the characteristics of a herpes zoster gangrenosus.

DR. JACKSON remarked that acne varioliformis had suggested itself to him; the location, however, was unusual for that trouble. There was nothing of the zoster element about the eruption.

Folliculitis, With Unusual Features:—Presented by DR. ROBINSON.

The affection was confined to the lower extremities below the knees, and commenced as small roundish patches, which gradually enlarged by peripheral extension, until some of them were 4 or 5 inches in diameter and circular in shape. A single patch was formed by pin-head size somewhat elevated, slightly reddish isolated lesions confined to the hair follicles, whilst the inter-follicular tissue was either normal, or if the patch had lasted some time, one or more weeks, there was an indication of a slight inflammation. As the lesions

were undoubtedly inflammatory in character with slight serous exudations, and were confined primarily to the hair follicles, and the patches increased in size by marked gradual extension at the periphery, without necessary implication of the interfollicular tissue, he concluded that the eruption was a local one due to an organism not a pus one, and represented an unusual form from an etiological standpoint of a parasitic inflammation of the hair follicles—a parasitic folliculitis—a parasitic follicular eczema.

Selections.

Precocious Hereditary Cerebral Syphilis. DR. D'ASTROS. (*Journal de Médecine*, Jan. 2, 1892.)

The writer in the French Association for the Advancement of the Sciences, spoke on the cerebral localizations in the newborn, to which Fournier has already called attention. These cerebral manifestations present themselves under various aspects: syphilitic meningitis (rare and ill defined); syphilitic arteritis of the arteries of the brain (quite frequent); gummata (rare and often during the second infancy); syphilitic ependymitis or ventricular syphilis, of which latter the author has observed two instances. The onset was quite precocious (one month after birth), and death took place in less than a month. At the autopsy (an acute ventricular hydrocephalus was found with embryonal infiltration in the ependyma and the striated bodies. The functional importance of the corpora striata for the reflex life of the infant is perhaps the cause of this localization. The cerebral gummata and syphilitic cerebral meningitis and arteritis are relatively late lesions, especially the first two; syphilitic ependymitis is the most precocious form and the most characteristic of hereditary cerebral syphilis. Its evolution appears to bear a relation to the degree of infectiousness of the syphilis. It is made manifest by a variety of nervous symptoms, convulsions, contractures, tremblings, strabismus, and especially by acute hydrocephalus of rapid development which is characteristic.

CHARLES W. ALLEN.

Bromide of Potassium in Certain Syphilitic Affections. DR. AUGAGNEUR. (*Deutsche Med. Zeit.*, Jan. 7, 1892.)

The author has found that in certain syphilitics, especially women, there often appears about the sixth or seventh month of the disease a dyspnoea which may have come on suddenly or only after a gradual onset of some eight or nine days which may lead to almost complete aphonia. It is not always a permanent but at times an intermittent aphonia, and for this reason the author concludes that the erythema of the mucous membrane of the larynx, which is usually the only thing found on laryngoscopic examination, can not be the sole cause of the alteration in the voice. In the belief that it is due more to a disturbance of innervation, bromide of potassium has been successfully employed in conjunction with iodide of potassium, as follows:

R. Kali. Iod.	10. 0	15. 0
Kali. Brom.	20. 0	
Syr. Aurant. Cort.	100. 0	
Aqu. Dest.	200. 0	

S. A tablespoonful twice daily. CHARLES W. ALLEN.

Syphilitic Reinfection. DR. ERNST FEIBES. (*Berliner Klin. Wochens.* No. 40, 1891.)

The author relates a case which increased the evidence in favor of reinfection as a possibility. Unlike most reported cases this one was under the writer's treatment in both infections. The primary and secondary signs were undoubted in the first attack, and treatment was carried out by means of salicylate of mercury injections.

In about a year and three quarters from the original chancre the patient again presented himself with a hard sore at the frenum, which had been present for two weeks, having appeared three or four weeks after coitus, and an indolent bubo in the groin which was typically syphilitic.

Dr. Thomson of Chicago, who happened to be present, agreed with the writer in regarding the case as one of syphilitic reinfection.

Treatment was begun at once, so that no secondary signs appeared. [It is unfortunate that in a case presenting such opportunities for observation something of a more positive nature could not have been recorded. The doubt will now always remain that the second sore was a simple one, taking on the appearances of chancre because of syphilis already present in the patient's system, the interval between the attacks not being sufficient to make it probable that a cure had been effected. The absence of eruptive elements after the second sore, due, as the author thinks, to the promptness of treatment, is a weak link in the chain of evidence.]

CHARLES W. ALLEN.

Cystitis, Etiology, Pathology and Treatment. TH. ROOSING. (From the Danish. *Ref. Annales des Maladies des Organes Génito-urinaires*, 1891.)

From careful examinations in thirty cases of cystitis, this author concludes that the urine usually contains *one* of several varieties of pathogenic organisms. Occasionally two or more forms may be found. These may be pyogenic or non-pyogenic. All of these organisms, with the exception of the tubercle bacillus, are capable of causing a decomposition of urea. Experiments upon dogs, by the injection of pure cultures into the bladder, were always negative, when the urine was allowed to pass at regular intervals. When, however, an artificial retention was occasioned by ligature of the penis for from six to twelve hours, the urine was found to be decomposed. This would give rise to vesical irritation, and if the organism employed was pyogenic, a suppurative cystitis would follow.

In twenty-three out of thirty cases, where the urethra of healthy individuals were examined, bacteria were found which were capable of causing a decomposition of the urine.

Regarding treatment, the author advised the internal administration of benzoic and boric acid, and the local use of solutions of nitrate of silver.

G. E. BREWER.

The Effect of Incomplete Sexual Intercourse upon the Male. A. PEYER. (*Ein Studie aus der Praxis.* Stuttgart: Verlag Von Ferdinand Enke.)

The untoward effect of the interrupted or incomplete sexual act in the production or aggravation of a condition of neurasthenia, is generally recognized.

The chief symptoms of this condition are, insomnia, restlessness, mental

depression, headache, partial or complete syncope, dyspepsia, diminution of the sexual appetite, and often absolute impotence.

Examination reveals the presence of a hypersensitive urethra, especially in the prostatic region, with marked hyperemia of the mucous membrane. The prostate may become enlarged.

In recent cases the prognosis is good if the cause can be removed: in more advanced cases, and where marked sexual weakness exists from congenital or other causes, the outlook is more grave.

The treatment should consist in measures undertaken to overcome the deep urethral sensitiveness, and to improve the general health.

G. E. BREWER.

Nervous and Mental Disturbances following the Extirpation of both Testicles. M. WEISS. (*Wien. Med. Press.*, 1890.)

The writer reports the case of a man fifty-four years of age, in whom a series of grave nervous symptoms occurred, shortly after the removal of both testicles for tubercular disease. This condition manifested itself by great mental and physical restlessness, agitation, palpitation of the heart, gastric crises, profuse perspiration, melancholia, syncope, etc. The author noted the similarity of these symptoms to those observed in women at the menopause, or after the removal of the ovaries.

He ascribes these disturbances to the absence of the normal secretions from these glands, which from the experiments of Brown-Sequard seem to have a marked tonic effect upon the nerves. The removal of this stimulant, he believes, results in a general nervous depression, as in cases where other habitual stimulants are suddenly suspended.

G. E. BREWER.

A Case of Local Hyperidrosis of the Face. IVAR SVENSSON. (*Hygien* No. 4, 1891.)

The writer was consulted by a man, thirty years of age, who was apparently in excellent health, yet who complained of a very troublesome sweating on the face. The sweat would roll down in pearls as soon as he would commence chewing his food, it being especially profuse on both cheeks and at the root of the nose, between the eyes. Milk could not be drank without sweating. The hyperidrosis was followed by a peculiar and disagreeable prickling and stitching sensation, accompanied by redness and swelling of the parts named. The swelling was distinctly aggravated by chewing salted meats or fish. This troublesome affection was so disagreeable that he was obliged when eating continually to wipe his face, and as it was obstinate to treatment he was nearly in despair. Lotions of carbolic acid and sublimate gave some relief; finally a tannin salve and avoidance of salted food caused the sweating to cease. The patient had always been a lover of salted fish, and had consumed it in large and unusual quantities. He claimed to know several persons in his neighborhood who lived upon salted fish and who suffered from the same affection, but to a less degree. The usual cases of hyperidrosis which come under the observation of physicians are referred to the hands, feet, or axillae. Cases of sweating of one side of the face are mentioned in the literature. Donders describes such a case where sweating took place during chewing. Drabowski mentions a similar case which was attributed to a wound. Riehl found at the necropsy of such a case both macroscopic and microscopic changes in the superior

ganglion of the sympathetic. Pikrowski details a case, where, on eating, the whole right side of the face would break out into a profuse sweat.

FRANK H. PRITCHARD.

Circumscribed Oedema of the Skin. NIELS ENGLUND. (*Hygien* No. 9, 1891.)

The writer describes in detail six cases of circumscribed oedema of the Skin. Although the clinical phenomena presented in these cases do not exactly correspond with the clinical picture of oedema cutis circumscriptum of Lesser, yet they cannot be classed either under erysipelas or urticaria. The patients were of all classes; four had had influenza, while the other two had not. No cause common to all could be discovered. In general, it may be said, that they all resembled each other in detail. Without any preceding malaise, chills, or fever, the disease first suddenly began with sharp rheumatoid pains in the joints, with a sensation of heat, tension, sticking and drawing pains in the part of the skin affected, which, excepting one case, was confined to the lower extremities. No effusion into the joints took place, neither could anything abnormal in the internal organs be discovered. Suddenly in a circumscribed portion of skin a diffuse and uniform redness would appear, with oedematous, doughy swelling of the corresponding part which would be elevated a millimeter or so above the surrounding skin. The exanthem had no tendency to spread; once out it would remain on that portion of the skin until it had disappeared. He had observed no recurrence.

ALBERT PICK.

Deviations of the Ureters from the Normal. POIRIER. (*Gazzetta degli Ospitali*, No. 60, 1891.)

The writer, for several years, had injected a large number of ureters and has found that a double ureter is by no means a rarity, he having found it eight times in 220 subjects. He has also observed that fluid, injected into the ureters, passes into the renal vein. This is not due to putrefaction of the corpse, although he first noticed it in a cadaver about 24 hours after death. Yet he confirmed it by experiments on living dogs. Whether it be a physiological phenomenon or due to rupture, the writer will not attempt to decide.

ALBERT PICK.

New Observations Concerning the Therapeutic Action of Ichthyol. A. STACQUART. (*Journal d'Accouchements*, January, 1892.)

Ichthyol proved very valuable in erysipelas; in a case of generalised pruritus, a 10 per cent. ointment and baths with ichthyol soap cured the affection in a few days. The same result was obtained in a case of pruritus scroti, and also in one of dermatitis accompanied with suppuration. Lichen urticans and also pruritus vulvæ, due to a severe leucorrhœa, yielded to the use of ichthyol soap.

GEORGE T. ELLIOT.

The Treatment of Erysipelas. STANISLAUS KLEIN. (*Berlin, Klin. Wochenschrift*, 1891.)

Klein says that he has used ichthyol for erysipelas during two years and would describe it as having an almost specific action in the disease. He

includes in his paper thirty-one cases, of which thirteen were very light, the remainder severe grades. Of these eighteen four died, two from croupous pneumonia, one from septic infection, the fourth suffered from fatty degeneration and dilatation of the heart. The remaining fourteen treated with ichthyol furnished the following results. The duration of the disease before treatment averaged 6 to 8 days. The duration of the ichthyol treatment averaged 3 days. In many the temperature fell in from 24 to 36 hours and remained normal. The procedures followed were, thorough washing of affected surface with soap and water and disinfection of all wounds existing. Then the ointment—ichthyol, water and lanolin, equal parts was rubbed thoroughly in with the hand. The surface was then thickly covered with the ointment, over which absorbent gauze moistened with an aqueous solution of salicylic acid was applied, and then covered with a thick layer of ordinary cotton batting. The dressing was kept in place by a bandage. The procedure was repeated two to three times daily and continued for three or four days after all elevation of temperature had ceased.

The conclusions of the writer are that:

1. Ichthyol retards the development of the erysipelas cocci in the skin, either by means of its reducing action on the tissues, or by direct influence upon the micro-organisms, or through both means.
2. The ichthyol treatment shortens the average duration of erysipelas one-half.
3. The treatment lasts from 3 to 4 days.
4. The course of the erysipelas is much milder under the influence of ichthyol, as demonstrated by the changed type of the fever when the treatment is instituted.

GEORGE T. ELLIOT.

Treatment of Atheromata. A. LUTZ. (*Monatsh. f. prak. Derm.* No. 12., Vol. XIII, 1891.)

Lutz recommends that Atheromata, which have suppurated and those which are thin-walled and very adherent, should be treated by *incision*, the contents are evacuated, the cavity lightly scraped with a curette and then painted with tincture of iodine. He had wonderfully good results and found it much easier and satisfactory than the treatment by *excision*.

GEORGE T. ELLIOT.

Ichthyol. T. CRANSTOWN CHARLES. (*The Lancet*, Sept., 91.)

Among cutaneous diseases Dr. Charles found ichthyol in an ointment of 2 to 10 per cent., especially valuable in burns of the 1st and 2d degrees, and in scalds. Externally and internally it was very efficacious in erythematous of unspecified nature. Several rapid cures of chilblains were obtained by washing with hot water and ichthyol soap, and subsequent application of ichthyol and turpentine, equal parts; of ichthyol and glycerine, equal parts; or of ichthyol 3 parts, glycerine, water and dextrin all 10 parts. In intertrigo it was also useful, as well as in zoster and in eczema, in acne and acne rosacea, in sycois and in psoriasis. He also found the ichthyol treatment very efficacious in boils, carbuncles and erysipelas.

GEORGE T. ELLIOT.

On the Treatment of Scrofuloderma and Lupus. H. G. BROOKE. (*The British Journ. of Dermatology*, Dec., 1891.)

Dr. Brooke reports several cases which could not be treated with radical measures, but in which he obtained satisfactory results by the use of an ointment suggested by himself about a year previously. Case I. was an old lupus, involving the whole ear and lower part of cheek and also extending upon the neck. In this case the first combination did not prove satisfactory on account of its color, etc., and he modified it as follows:

R Zinc, oxid.
 Pulv. Amyli, aa ¼ oz.
 Vaseline Alb., ½ oz.
 Hydrarg. Oleat, 5%, 1 oz.
 Acid. Salicyl., 20 gr.
 Ichthyol, 20 gr.
 Ol. Lavandulae, q. s.
 M. Et fiat Ung.

This ointment was well rubbed in and under its use the disease began disappearing slowly and the affected field became greatly reduced.

Case II. was also one of lupus and very much severer than in the previous patient. The use of the ointment, however, gave very satisfactory results. Case III. was one of scrofulodermic abscesses, and likewise Case IV. The effect of the treatment in these two was also excellent. Brooke states that the best effects are obtained in cases of scrofulodermic tumors and ulcerations, but is also pronounced in those cases in which lupus has developed from a scrofulodermic base. For pure lupus, the effect is weaker, especially if there is much sclerosis or old scarring, and he only uses it as an auxiliary measure, when the disease is in the form of simple yellow brown nodules without apparent inflammation.

L

GEORGE T. ELLIOT.

Items.

Lues of the Pleura. Dr. Nikulin. (*Berliner Klinische Wochens.*, No. 40, 1891.)

The writer relates two cases of syphilis of the pleura—one belonging to the second, and the other to the third of the following forms into which, according to the writer, implications of the pleura can be divided.

1. Extension of lues of the lungs to the pleura. *Pleuro-Pneumonia syphilitica*, if we may so call it.
2. Extension of lues from the lung walls of the thorax to the pleura. Extension of syphilitic periostitis of the ribs, which from its analogy to similar non-specific processes we can call *Peri-phuritis Syphilitica*.
3. Lues of the pleura proper—primary syphilitic inflammation of the pleura—*Pleuritis Syphilitica* or lues pleurae.

The International Executive Committee of the Pan-American Medical Congress.—The Committee on Organization of the Pan-American Medical Congress, at its meeting at St. Louis last October, elected the following In-

ternational Executive Committee : *The Argentine Republic*, Dr. Pedro Lagleyze, Buenos Aires; *Bolivia*, Dr. Emelio Di Tomassi, La Paz; *Brazil*, Dr. Carlos Costa, Rio de Janeiro; *British North America*, Dr. Jas. F. W. Ross, Toronto; *British West Indies*, Dr. James A. De Wolf, Port of Spain; *Chili*, Dr. Moises Amaral, Santiago; *United States of Colombia*, Dr. P. M. Ibañez, Bogotá; *Costa Rica*, Dr. Daniel Nuñez, San José; *Ecuador*, Dr. Ricardo Cuelou, Guayaquil; *Guatemala*, Dr. José Monteris, Guatemala Nueva; *Haiti*, Dr. D. Lamothé, Port au Prince; *Spanish Honduras*, Dr. George Bernhardt, Tegucigalpa; *Mexico*, Dr. Tomás Noriega, City of Mexico; *Nicaragua*, Dr. J. I. Urtecho, Grenada; *Peru*, Dr. J. Casamira Ulloa, Lima; *Salvador*, Dr. David J. Guzman, San Salvador; *Spanish West Indies*, Dr. Juan Santos Fernandez, Habana; *United States of America*, Dr. A. Vander Veer, Albany, N. Y.; *Uruguay*, Jacinto De Leon, Montevideo; *Venezuela*, Dr. Elias Rodriguez, Caracas.

Hawaii, Paraguay, Santo Domingo, the Danish, Dutch and French West Indies are not yet organized. Nominations of local officers have been received from a majority of all the members of the International Executive Committee, and a number of the lists have been confirmed by the Committee on Organization. These will be announced as rapidly as acceptances are received.

CHARLES A. L. REED,

Cincinnati, January 15th, 1892.

Secretary-General.

Second International Dermatological Congress.—As announced at the close of the first International Congress on Dermatology, held in Paris on the 10th of August, 1889, the second triennial meeting of the same will be held at Vienna from the 5th to the 10th of August, 1892.

The following papers have up to this time been announced :

Lymphatic Affections of the Skin. Considered from an Anatomico-pathological Standpoint. Dr. R. Paltanuf, of Vienna.

Leprosy in Europe. Dr. Arning, of Hamburg.

Parasitic Affections of the Skin. Dr. Feulard, of Paris.

Late syphilis. Prof. Neumann, of Vienna.

The Anatomy and Development of Pigment in the Epidermis. Prof. Jarisch, of Innsbruck.

Psoriasis. Prof. Neisser of Breslau, and Prof. Boeck of Christiania.

The Treatment of Gonorrhœa. Prof. Neisser of Breslau.

Lupus Erythematosus. Dr. Malcolm Morris of London.

Prof. Kaposi of Vienna will be *President* of the Congress, and Dr. G. Riehl, of Vienna, the *Secretary-General*.

Dr. P. A. Morrow, 66 W. 40th Street, New York, has been appointed Secretary for North America.

American Association of Andrology and Syphilology will hold its annual meeting at Richfield Springs, N. Y., June 21 and 22, 1892. A. T. Cabot, M. D., 3 Marlborough street, Boston, *President*; J. A. Fordyce, M.D., 66 Park Avenue, New York, *Secretary*. Titles of papers to be read should be sent to the secretary.

Section on Genito-Urinary Surgery, New York Academy of Medicine.—At the January meeting of the section, Dr. E. L. Keyes was elected *President* for the coming year, and Dr. Samuel Alexander re-elected, *Secretary*.

Abortive Treatment of Furuncles.—(*Journ. des Malad. Cutan. et Syph.*, November, 1891.) The site of the furuncle must be washed with a carbolic solution (1 to 40), or with one of bichloride of mercury (1 to 500). Then with a brush dipped in carbolized oil, apply twice daily over the furuncle a powder of zinc oxide and iodoform, equal parts. The furuncle disappears without an incision being necessary.

Pommade for the Pigmentations of Pregnancy.—(*Journ. des Maladies Cutan. et Syph.*, November, 1891.)—On the authority of the *Union Médicale*, the following pommade is recommended.

- R Zinc, oxide, 0.30.
- Hydrarg. oxid. flav., 0.15.
- Olei Ricini.
- Ol. Theobrom. aa. 75.
- Essence Rosemary, gtt. 10.
- M. External use twice daily.

Treatment of Freckles. *Pharm. Ztg.*, 1891, No. 46.

- R Zinc, sulphocarbolat., 1.
- Glycerin, 20.
- Alcohol, 10.
- Aque anrant, flor. 5
- Aq. Rose, 100.
- M. Wash the face with lotion twice daily.

Indicanuria in the Newly-Born. **M. C. Hochsinger.**—(*Wiener Med. Press.*, 1890.) The urine of newly-born children never contains indican in health. It is never present in the ordinary digestive disturbances common to that age. In cholera infantum, however, and in tubercular disease, it is almost invariably present. Its detection, therefore, in the urine, when no intestinal affection exists, should excite a strong suspicion of tuberculosis.

Enumeration of the Spermatozoa. **Dr. O. Guelliot.**—(*Annales des Maladies des Organes Génito-Urinaires*, 1891.) This author estimates the number of spermatozoa in each cubic millimetre of healthy semen to be 137,500. He regards the average amount of fluid discharged at each ejaculation to be about three cubic centimetres, which would represent a loss of 412,500,000 spermatie elements.

An Aseptic Dermal Pocket-Case.—Although the equipment of the dermatologist is supposed to consist of drugs rather than of instruments, it is generally recognized that in many forms of skin disease surgical treatment yields much more prompt and brilliant results than can possibly be gained by the application of drugs. While many ingenious instruments have been devised to meet special indications in particular forms of skin disease, the catalogue of the surgical instrument maker is singularly poor in the collection of such instruments in the compact form of a pocket-case. In Dr. Morrow's dermal-case will be found an admirable and judicious selection of the instruments required for the daily use of the dermatologist. They are beautifully made, and of the most modern and approved pattern. The instruments and case possess an advantage which in the present day of antiseptic surgery is indispensable—they are perfectly aseptic.



DR BRAYTON'S CASE OF XERODERMA PIGMENTOSUM

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No. 4

Original Communications.

XERODERMA PIGMENTOSUM; THE THIRTEENTH AMERICAN CASE AND CLINICAL HISTORY OF TWO CASES IN THE SAME FAMILY.

BY

ALEMBERT W. BRAYTON, M. S., M.D., OF INDIANAPOLIS, IND.

Professor Pathology Medical College of Indiana, and Dermatologist to the Indianapolis
City Hospital and Dispensary.

SEVEN children were born in the family of the case presented; male, age twenty, healthy; male died at nine years of malignant tumor of face, a sequel of xeroderma; female, age sixteen, the patient presented in the plate; the fourth, fifth and sixth children, males, now healthy; the seventh child, a female infant of one year, is yet free. She is probably exempt as the brother and sister were attacked between the fifth and sixth months of infancy. The parents are well-to-do German farm people, moral and intelligent. There is no hereditary taint, no consanguinity. It will be remembered that five of Dr. Taylor's seven cases occurred in two Jewish families. In one family of ten, the second, sixth and seventh daughters were victims, the parents being cousins. The sister of the mother of these children married a maternal second cousin; of their five children the second and fifth daughters are sufferers from xeroderma. Dr. J. C. White's (*Journal of Cutaneous and Venereal Diseases*, December, 1885) two cases were brothers. Nine of the American cases are in four families.

The cases presented have followed the ordinary course. The

parents and local physicians give the usual history of sunburn at the sixth month, followed by freckles of the cheeks ; in a year the face and neck were invaded ; the second and third summers the extremities to knee and elbow were mottled brown, black and red, with white patches intermingling. That is all except that the boy had numerous tumors of the face, became weak and sickly in his seventh year, suffered from ectropion, developed a rodent ulcer at the base of the nose, which destroyed the nose, eye and upper jaw. The clinical history of the brother's case I have from my friend, Dr. J. A. Sutcliffe, who saw the case in consultation before there was any generally accessible literature of the disease, and who states that the entire series of early lesions were the same in the boy as in the girl. Therefore there is no doubt as to the diagnosis in the case. The boy died of malignant tumor of the face, a sequel to xeroderma pigmentosum.

I should judge that in the present case one half the whole surface is invaded by the primary lesions, the pigmentations telangiectases and atrophic patches. The palms, soles, chest, scalp, back and abdomen are free. Large areas of the outer thigh, leg and arm are covered with branny scales resembling mild ichthyosis. The parts involved do not perspire in summer heat or vigorous exercise.

Probably one half of the face, neck and extremities have undergone the atrophic process. The spots are from the size of a pin head to a quarter. The skin is thin as parchment, the follicles are destroyed, the white patches are traversed by minute lines ; a smooth, white pearly contracting surface is left. The result of this skin shrinking is incomplete stenosis of the mouth and nasal apertures, diminution of the ears, and ectropion with resulting conjunctivitis and photophobia. The ectropion, the pinched and withered condition of the whole face, are well shown in the water color from which the accompanying plate is made. (See chromo-lithograph.) But it is impossible for the artist to give any exact delineation of the telangiectases. I saw the patient recently. She has been in the house most of the time. The summer tan is gone, but the tattooing of pigment deposit and irregularity of capillary growth producing the red areas presents a picture no brush can show. The blood seen through the thin membrane is bright red ; it is arterial ; it has no work to do for the skin textures are destroyed ; there is an infinite variety in the figures produced by the enlarged and distorted vessels.

The pigmentations and blood splotches are running their course; the result is atrophy and the atrophic areas are constantly increasing. They have deformed the face and the eyes, but so far have not caused much pain or discomfort. The girl at fifteen was stout, well knit and hearty, fully developed, and weighing about one hundred and fifty pounds.

For several years there has been no further extension down the back, scalp and breast, or upward to the trunk. But the black and red spots continually yield to the white; it would seem as though a general atrophy of the parts infected must result. The nails and hair are healthy, the latter even thick and long; the eyebrows and upper lashes are not impaired.

The neoplasms in this case have not as yet passed beyond the benign type. Scattered among the white, red and brown and black spots, are ordinary warts; they are most common about the hands and feet. There are also plaques or spots resembling senile keratosis. There are numerous dark soft red compressible blood tumors on the arms, legs and face. These become pale and bloodless, dry up and fall off, or are broken away by accident. If torn off the base bleeds profusely for some time, an hour or more in one I removed at the City Hospital. Such a patch is shown upon the skin, where it had been forming several months; it has since fallen off, but its whole course occupied nearly a year.

The tendency of apparently similar patches at the junction of the skin and mucous membrane is to grow larger and to develop fungating surfaces. Such are the tumors shown in *Sajous' Annual* for 1889, vol. 10, p. 53, and denominated by Hutchinson as multiple lupus of childhood, although the whole picture presents a typical case of xeroderma pigmentosum.

The present case is developing an ulcerous process at the base of the right nostril. The tissue is nibbled away much as in lupus to the depth of nearly a quarter of an inch. It seems to be the only present element of danger, as it has returned after cleansing and removal.

As nearly one-half the known cases of xeroderma pigmentosum have suffered from malignant growths before twenty years of age, and most of them have died, we recognize the danger of early malignancy as a concomitant or sequel of the disease. Kaposi states that the tendency to epithelioma is due to the excessive aberrant growth of the inter-papillary prolongation of the rete malpighii in the pigment spots.

The well-known tendency of these pigmented areas to

become malignant is sufficient warrant for their early removal, particularly when occurring about the eyes, mouth and nose.

Aside from favorable hygienic surroundings, shading the eyes by screens and glasses, and protection of the skin from irritation, there has been no attempt at treatment since the case fell under my observation, and its real nature was discovered. It is needless to say that before the diagnosis of xeroderma was made by me, efforts were made to improve her condition by her physician under the impression that the disease was lupus, or scrofuloderma, or naevi, or ichthyosis, or possibly a combination of various skin diseases.

Lupus was the favorite diagnosis. Under this impression the patient was brought to the city hospital from her country home, to be treated by Koch's lymph and so fell under my observation. The case was recognized as Kaposi's disease and presented at the hospital clinic and also to the State Medical Society the following May. The lymph was given up to five milligrams without result. It would seem that such an entity with its varied lesions should be known at first glance. But the disease is rare, not over one case in five million people in the United States. Quite possibly cases have been overlooked for years and have died unrecorded, as with the brother of the present case. Several recent books and atlases of skin diseases do not mention the disease. Shoemaker (*A Text-Book of Diseases of the Skin*) hides a brief paragraph in his article on atrophy of the skin. Von Harlingen (*Handbook of Skin Diseases*) gives it due attention, using Dr. Taylor's title of 1877, "Angioma pigmentosum et atrophicum." Dr. Morrow (*Atlas of Skin and Venereal Diseases*) presents the subject fully. For the classical description of this disease we naturally turn to the tabulated abstract and clinical history of the forty cases collected by Dr. Taylor and published in the *Medical Record* March 10, 1888. The detailed history of his seven cases observed during a period of fourteen years, presents the subject so fully that it is only necessary to refer to it as the fullest source of information.

The present case presents nothing new. It is notable on account of the good health, the variety of lesions of both classes, the tendency to ulceration at the base of the nose, the death of a brother by the same disorder, the overlooking of this case for fifteen years, the opportunity of now keeping it under close observation, and the fact of an infant sister not yet perhaps passed the danger line.

As yet the writer has secured no sections of the skin. To be of value they should include all the primary lesions and their transition stages. The neoplasms which follow the primary stages may be simply accidents in the course of the disorder. Their interest centres in their variety, the preponderance of epithelioma in such young subjects with absence of gland involvement and metastasis to inward parts, and in their early and certain fatality.

As the patient has had the disease nearly sixteen years without serious lesions save the ectropion, is now in good general health, and not the victim of mental suffering or despondency, such as brooding over so disfiguring, chronic and hopeless an ailment so often incites, she is likely to have the fullest length of days possible to the disease.

36 East Ohio street.

REMARKS ON THE HISTOLOGY OF XERODERMA PIGMENTOSUM.

BY

S. POLLITZER, A.M., M.D.

I HAVE been asked by the Editor of this JOURNAL to supplement Dr. Brayton's description of his two cases of *xeroderma pigmentosum*, with a brief account of the histology of that affection, based on my own observations.

During my residence in London, in 1890, I had an opportunity of seeing one of the three English cases of xeroderma pigmentosum through the courtesy of Dr. H. Radcliffe Crocker, and I am indebted to him for some specimens which he removed from one of the tumors in the patient's face and for his kind permission to make use of them in this publication.

Dr. Crocker, it will be remembered, published in 1884 an account of three cases of xeroderma pigmentosum (the only examples of this disease observed in England) affecting three members of the same family. In the youngest of these, a boy of nine years, the disease had at that time made not much progress. The face, neck, arms and forearms were deeply pigmented, there was considerable atrophy of the skin of the face, very few telangiectases, some superficial ulceration especially below the eyes, and a few warty growths, which proved to be papillomatous granulomata. When I saw the boy in 1890, he

presented the disease in an advanced stage. Fungating and ulcerating tumors had developed in different parts of the face, and the atrophic changes in the skin were very marked. A photograph taken at that time sufficiently illustrates the extent of these changes (See Fig. 1), a description of which need not detain us now. The following extracts from a letter of Dr.



Fig. 1.

Crocker's under date of February 25, 1892, may be of interest: "All three cases are still alive, but I have not seen them since you saw them with me. The boy had made much more progress downwards than either of the other two in whom the disease was comparatively quiescent. I send you a photograph of him taken on May 1, 1890. . . . Compare it with the portrait of him in the *Med. Chir. Trans.* [1884], and you will see how he has gone to pieces."

A part of the lower tumor on the cheek was excised, and, as it represents a later phase in the development of the disease, the stage of malignant growths, it may be well to precede a description of its histology with an account of the earlier changes in this disease. In presenting this resumé I shall not follow any single author, but shall make use of all previous publications on the subject, especially those of Kaposi, Neisser, Vidal, Crocker, Taylor and Elsenberg. The first change consists, probably, in a hyperemia. It is true that in many of the recorded cases there is no history of erythema; but in view of the facts that a temporary redness of the face in an infant may so easily be overlooked, and that this symptom is recorded in perhaps the majority of cases, we may assume it to be the rule. Accompanying the vascular dilatation, there will be increased exudation of serum, leucocytic infiltration, and probably more or less red blood-corpuscle diapedesis. We have thus at hand the material for the next marked change, the accumulation of pigment in the skin, located chiefly in the lower layers of the rete. Meanwhile, in consequence of the increased blood supply, there is an increased development of the surrounding connective tissue, which goes on to the production of more or less sclerosis, which in turn compresses the blood vessels in places inhibiting thus the nutrition of other parts. At the same time changes within the vessels are taking place, resulting in endarteritis obliterans. This interference with the circulation explains the occurrence of the next notable clinical changes, the development of atrophic patches, and the telangiectases; the diminished nutrition explains the first, the occurrence of congestion and of collateral hyperemiae the second symptom. The atrophic patches, under the microscope, show nothing characteristic; the rete is reduced to a few rows of cells; there is no pigment present; the papillae are few and small or entirely wanting, there being a sharp line of demarcation between the epidermis and the cutis. The latter presents a dense connective tissue in which the glandular structures are for the most part reduced in size and evidently in process of atrophy. The blood vessels are sparse in some places, frequently with their lumen diminished through endarteritis, and in others enormously dilated, forming large, irregular vascular channels resembling angioma. Later, patches of connective tissue may undergo myxomatous degeneration. The regions around the vessels are considerably infiltrated with round cells, and we may have at this period—toward the end of the second stage in the progress of the disease—the picture of a

granuloma interspersed with patches of angio-myxoma. The warty growths which occur in this period and which form the connecting link between it and the third, the period of malignant growths, are generally granulomata, commonly papillomatous in their structure, and are covered by a thickened epidermis with long rete proliferation into the body of the tumor. The superficial ulcerations like the distortion of the mucodermal orifices, which develop throughout this period, may be regarded as purely secondary lesions. The latter are the effect of the sclerosis and the atrophy; the ulcerations probably result from the bacterial infection of the cracks and tears—rhagades—which occur naturally in such a skin in so mobile a region as the face.

We come now to the third stage, that of malignant growths. Almost every variety of malignant growth has been described by the various authors, and there appears to be considerable differences in different tumors or cases. The specimen from Dr. Crocker's case shows on examination so many different kinds of neoplastic formation that it may be regarded as a typical case for purposes of histological study. The portions removed included parts which had ulcerated as well as others which were still covered by epidermis. The stratum corneum was in many places very much thickened; the rete malpighii at the seat of the ulcerations thinned or wanting, elsewhere as a rule very much thickened, and its interpapillary processes greatly proliferated, irregular branching processes extending far down into the cutis helping to form there the picture of epithelioma. Below the epidermis there is the greatest conceivable confusion in the arrangement of the new formed tissue; sarcoma, spindle and round-celled, epithelioma, myxoma, with patches of granulation tissue and large vascular channels interspersed. The illustration, Fig. 2, will convey an idea of the variety and arrangement of the elements of this peculiar growth. The sarcoma occurs indifferently in various parts of the tumor. In some sections it appears to form a considerable part of the growth, in others it is entirely wanting; it is commonly of the small spindle-celled variety, but there are patches of round cells which from their size and their dense and uniform aggregation give the impression of being round-celled sarcoma rather than simple granulation tissue. The myxoma occurs in irregular scattered areas of moderate size, and seems to be derived from the connective tissue. The round-cell infiltration is frequently limited to the region around a small blood

vessel, but often extends over large areas. The epithelioma forms the one constant feature in all parts of the tumor. It occurs as long bands projecting downward from the rete, and splitting up below into patches, streaks and islands of the most



Fig. 2.

a, Epidermis; *b*, Spindle-celled sarcoma; *c*, Epithelioma; *e*, Round-celled sarcoma; *f*, Epithelial "pearls"; *g*, Granulation tissue.

fantastic shapes. At times it lies in the midst of granulation tissue, again the little islands are surrounded by spindle-celled sarcoma, or adjoin myxomatous tissue. In short it occurs throughout the entire extent of every section and forms pre-

eminently the important part of the tumor. Epithelial "pearls" occur frequently, and among the cells themselves the most wonderful variety of mitoses normal and pathological, and of nuclear and cellular degeneration may be found. The connective tissue which forms a large part of the tumor appears loose and oedematous in some places, in others contains large and numerous fibroblasts. The blood-vessels are seldom normal, their endothelial lining is often swollen and proliferated. In some places there are broad thin-walled spaces filled with blood. I find no evidence of proliferating blood-vessels. Of glandular structures

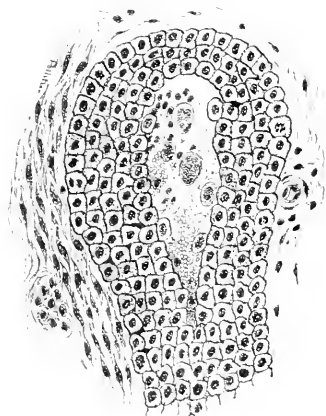


Fig. 4.

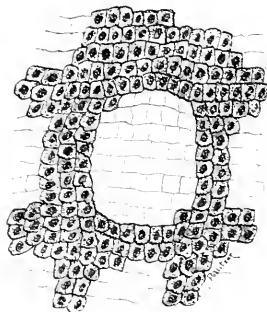


Fig. 3.

and hairs there was for the most part nothing to be seen. In only one section was there a thinned degenerated hair follicle and the remains of a sebaceous gland.

All these various changes have been described in different cases by previous writers on the anatomy of xeroderma pigmentosum. The tumor which I have briefly described has, however, the peculiarity of presenting at once, frequently in a single section, all these varieties of new growth and degeneration.

I have observed, however, two kinds of degeneration which I believe have not before been described in these tumors. First, in some places in the deeper part of the tumor the epithelial

new growth appeared to form a network inclosing quite regular clear spaces, suggesting the rare form of neoplasm known as *cylindroma carcinomatodes*. With a higher power, however, these clear spaces were found to contain a delicate reticulum looking like skeletons of cornified cells containing no trace of a nucleus or protoplasm (see Fig. 3). In the *cylindroma carcinomatodes* the clear spaces are filled with a perfectly homogeneous colloidal matter, and the peculiar degeneration referred to here cannot therefore be classed with that variety of cancer. The cells of the epithelial reticulum show no signs of growth, no mitoses, but on the contrary many of them are undergoing degeneration. I have never seen anything like it. Is it possibly an early stage in the formation of *cylindroma*?

Second, in some parts of the tumor, in the upper regions as well as in the deeper, there were exudations of serum, generally into a mass of epithelial tissue, constituting parenchymatous vesicles, of various sizes, sometimes microscopic, at others large enough to be visible in the section to the unaided eye. The borders of these vesicles were generally the epitheliomatous cells into which the exudation had taken place; often, however, only one side of the vesicle was lined with epithelium, the other sides being less sharply defined granulation tissue. The vesicle itself was filled with granular matter, fibrin, red-blood corpuscles, a coarsely granular amorphous matter probably disintegrated red-blood corpuscles, leucocytes, and epithelial cells. The latter showed the forms of degeneration which we commonly see in vesicles formed in the rete, as in *Herpes zoster* for instance. The peculiar large dropsical cells, with compressed crescentic nuclei and body filled with leucocytes, which Pfeiffer has described in *zona* as forms of protozoan parasites, occurred commonly.

These forms of degeneration must play an important role in the breaking down of the tumors which marks the last stage of *xeroderma pigmentosum*.

21 West Fifty-second street.

SOME DIFFERENTIAL POINTS IN THE DIAGNOSIS OF SYPHILIS AND TUBERCULOSIS WITH ILLUSTRATIVE CASES.¹

BY

PRINCE A. MORROW, M.D.

Surgeon to Charity Hospital.

THE objective identity of many of the manifestations of syphilis and tuberculosis renders their differential diagnosis oftentimes a matter of extreme difficulty even to the most practiced physician. The recent advances made in our knowledge of the pathology of syphilis have, paradoxical as it may appear, materially enhanced the difficulty of establishing a positive diagnosis in these cases. The wider and more exact knowledge of the manifold and complex relationships of syphilis, developed by modern research, has introduced an element of confusion in the interpretation and classification of many morbid states concerning the nature of which there was formerly no question. The explanation of this is not far to seek; formerly this class of manifestations was unhesitatingly referred to struma as the generating cause, but with a clearer appreciation of the fact that syphilis is capable of causing analogous if not identical phenomena, many lesions formerly classed as scrofulous are now recognized as undoubted expressions of the syphilitic diathesis. There is perhaps no manifestation of tuberculosis which may not be accurately simulated by syphilis.

The elucidation of the etiological factor in these doubtful lesions is important from the standpoint of scientific accuracy, but especially so from a practical point of view, since the recognition of a syphilitic element brings them within the resources of a medication which is most prompt and powerful to cure.

In the endeavor to differentiate between these morbid types the ordinary method of procedure must be modified. The objective character of the lesions which ordinarily serve as the basis of diagnosis furnish no valuable indications, since they may be common to both. The eruptive elements, the localization and grouping, the entire clinical picture, may be similar in both diseases. In seeking points of distinction and difference we find only analogies and resemblances. There may be present no single symptom pathognomonic of either which shall serve as the point of departure of a clear line of demarcation between

¹ Read before the New York Academy of Medicine, Genito-Urinary Section, January 14, 1892.

them. Subjective sensations are absent in both, so that we are compelled to rely upon the history, the concomitant symptoms or pathological coincidences. Even these in turn may fail and we may be forced to fall back upon the test of treatment as the only available means of diagnosis. It is well to bear in mind that the problem may be still further complicated by the coincident development of syphilis and scrofula in the same subject. The co-existence of the two diseases in the same individual has, indeed, suggested a possibility of the combination or symbiosis of the two morbid processes, constituting what has been termed *scrofulo-syphilis*.

The case now presented illustrated in a peculiarly forcible manner, especially when the patient first came under observation, the difficulty often encountered in practice of differentiating between lesions common to both tuberculosis and syphilis. Happily in this instance any doubt as to the syphilitic character of the accidents was speedily cleared up by the intervention of specific treatment.

The patient, *æt.* 22, was referred to me by Dr. V. P. Gibney November 28, 1891. He was born in Ireland, came to this country eight months ago. His family history is good. His father died *æt.* 76; his mother, *æt.* 59, is still living. Of his three brothers and two sisters all are living in good health, with the exception of one brother who died of consumption. When nine years old the patient had an attack of typhoid fever which left bed sores that were several months in healing, with this exception he has always enjoyed fair health. About four years ago he had two or three venereal sores which his physician pronounced to be hard chancres. They were cauterized and healed in three or four weeks. He gives no history of a generalized eruption, alopecia, mouth lesions or other secondary manifestations.

About a year ago he had a swelling just underneath the left ear which resulted in an abscess. This was opened but did not heal for a long time; six months ago he observed a number of sores in the left cervical triangle which, when he came under my observation, were still ulcerous and covered with crusts. Over the outer anterior aspect of the right elbow joint there were four or five lesions of circular contour surrounded by reddish-brown pigmented borders, one of which had cicatrized, the others were still ulcerative and encrusted.

In Jan., 1890, he observed that his left testicle was swollen and slightly painful. A physician strapped the testicle, and, three months later, tapped him for hydrocele. At present there is evidence of a slight accumulation of fluid in the vaginal sac. The body of the testicle is hard, swollen to three or four times

its normal size, but still preserving its ovoid form. The upper portion is capped by a plate-like induration of cartilaginous hardness, with nodular protuberances here and there. This was at first thought to be the epididymis, but more careful examination showed that the epididymis was only partially embraced by this shell-like covering.

The testicle was absolutely insensitive and could be roughly handled without provoking pain. The vas deferens was apparently normal. About six or eight months ago he observed a swelling of the right elbow joint which had gradually increased, interfering with free motion of the joint. When he came under my observation the appearance of the joint was strikingly suggestive of a white swelling. Examination showed that there was marked enlargement of the lower end of the humerus and the head of the radius. There was marked ankylosis. The arm was flexed at an angle of forty-five degrees, and pronation and supination were interfered with. There was also a prominent enlargement of the lower end of the radius.

The condition of the right ankle joint could not be ascertained from examination, as it was securely done up in a plaster bandage which I did not care to remove. I am indebted to Dr. Gibney, under whose care the patient had been, for notes of the condition of the ankle joint.

OSTITIS OF THE RIGHT ANKLE, INVOLVING THE EPIPHYSES TIBIA AND FIBULA.—While crossing on the steamer in April last, in stepping down the companion way, he slipped and sprained his ankle. He walked about on it, but it pained him whenever he used it much. Has troubled him ever since. Has been to Forty-second Street Hospital, Out Patient Department, four or five weeks, wearing an anklet.

The movements are restricted in flexion, in and e-version, and extension. The foot hangs at an angle of about 110° . Over each malleolus there is a large swelling, boggy, and the outlines of the bone are ill-defined. This is still more true at the inner malleolus. It almost amounts to fluctuation. The bones of the tarsus seem to be normal, so far as one can tell by handling. The measurements are:

Just above the swelling.....	8 $\frac{3}{4}$
Over the swelling.....	11 $\frac{1}{2}$
Heel and instep just under the swelling.....	12 $\frac{3}{4}$
Instep.....	9 $\frac{1}{4}$
Calf.....	11 $\frac{1}{2}$

August 6th, put up in a water glass splint at the hospital, plaster-of-paris over this, to have the plaster removed a few days later.

November 28th, syphilitic nature of the disease suspected and patient referred to Dr. Morrow, New York Hospital, for treatment.

Under the influence of specific treatment there was a prompt amelioration of all the symptoms. The cutaneous lesions healed, the size of the testicle has been reduced more than one-half, with resorption of many of the protuberant nodules, the swelling of the joint has decreased wonderfully, permitting much more extended and freer movements.

It will be seen from this history that the patient presents three orders of lesions affecting the tegumentary, the genital and the osseous systems respectively. In order to bring out certain points in the differential diagnosis of tuberculosis and syphilis it will be convenient to consider in detail the chief characteristics of their manifestations upon these organs.

CUTANEOUS LESIONS.—Although the eruptive elements in the case just reported were neither extensive nor first in order of development, yet in many cases of tuberculosis and syphilis, the cutaneous manifestations constitute most important diagnostic features. I shall not attempt to cover the broad field of the differential diagnosis of scrofulo-derma and syphilo-derma, but shall refer more especially to the limited class of scrofulous lesions with which the tuberculo-ulcerous syphilide is liable to be confounded.

Certain general distinctions between the manifestations of each morbid type may thus be formulated.

1. Syphilitic lesions are general in their distribution, they may occur upon any region of the body. Scrofulous lesions are more limited in their localization, they have a special predilection for the neck or regions rich in lymphatic glands.

2. Syphilitic lesions are ambulatory and changing, they disappear and re-appear elsewhere. Scrofulous lesions are fixed and permanent.

3. The color of syphilitic lesions is of a reddish-brown, or lean ham tint—the color of scrofulous lesions is brighter and more violaceous in hue.

4. Syphilis is distinguished from scrofula in its objective appearances and mode of evolution. In the initial stage the syphilitic neoplasms are firm and hard; the scrofulous infiltrations are softer and more compressible. In the ulcerative stage the differences are more pronounced; the ulcers of syphilis are cleanly cut, regular in contour with perpendicular firmly infil-

trated borders, encircled by a pigmented areola; scrofulous ulcers are irregular, with soft undermined borders, they are painless, bleed easily and show slight tendency to spread.

5. The crusts of syphilis are bulkier, thicker, with a tendency to accumulate in layers, and darker in color; the cicatrices are smooth and remain long surrounded by a pigmented areola. The crusts of scrofula are softer, more adherent; the cicatrices are elevated, irregular, bridled; they retain their violaceous color for a long time.

6. The course of the syphilitic ulcer though sluggish and chronic is much more rapid than that of scrofula.

7. Absence of pain and local reaction characterize both syphilitic and scrofulous ulcers; they are essentially lesions without symptoms.

GENITAL LESIONS.—Syphilitic epididymitis which occurs as a rule early in the evolution of secondary syphilis, usually about the fourth or fifth month, sometimes much later, is not apt to be mistaken for tuberculosis of the testicular apparatus, except in the beginning stage of tuberculous deposit in the epididymis. It affects the epididymis in the form of a small swelling or nodule, situated almost exclusively in the globus major, exceptionally in the globus minor, still more rarely in the body of the testis. It is frequently bilateral; it is slow in development, indolent, painless, never suppurates, and undergoes rapid resorption under the influence of specific treatment.

The specific lesions of the testis which are to be differentiated from those of tuberculosis are distinctly tertiary, of the neoplastic or gummous type.

Syphilitic Sarcocoele, or syphilitic albuginitis as it is generally termed, is essentially a late manifestation occurring from the third to the twentieth year after infection, only exceptionally it is a precocious accident. Jullien observed it in 25 out of 234 cases of tertiary syphilis, a little over ten per cent. Fournier observed it in 6 out of 212 cases of hereditary syphilis, presenting identical features with those of the acquired disease. The affection may be unilateral but is commonly bilateral, involving both testes simultaneously or successively. There are no statistics with which I am acquainted that give the relative proportion in which the testis is involved in tuberculosis. In a recent valuable monograph by Hjalmar Heiberg on "Die Primäre Urogenital tuberkulose des Mannes und Weibes" the analysis of 84 cases of genito-urinary tuberculosis shows

that in 16 cases of primary tuberculosis the testicle was involved in 13; in 8 it was bilateral, in 5 it was one-sided. In 26 cases of secondary tuberculosis of the urogenital apparatus this organ was tuberculosed in 23; in 9 cases the disease was bilateral, in 14 one-sided.

Without entering into a description of the clinical features of syphilis and tuberculosis of the testis certain cardinal points of difference may be referred to.

1. The seat of syphilitic sarcocele is essentially testicular, in a majority of cases the epididymis escapes or is only incidentally involved in the infiltration; the primary seat of tubercular infiltration is always in the epididymis, the body of the testis being secondarily involved.

2. In syphilitic sarcocele the ovoid form of the testicle is preserved. Hyperplastic infiltration of the connective tissue may be general or partial, presenting in the form of indurated plaques of cartilaginous hardness which cap the body of the testis like a shell. These vary in area and thickness and may be associated with hard nodular deposits upon the surface or in the body of the testicles which form knobby protuberances. The tuberculous testis is increased in size, hard, irregularly nodular or lumpy.

3. In syphilis there is but slight tendency to degeneration or breaking down of the gummous nodules; in tuberculosis there is a more marked tendency to suppurative changes, the formation of abscesses and fistulous tracts.

4. Syphilitic fungus of the testicle is comparatively rare; it is characterized by the discharge of gummous material and disintegrated tubules, with more or less abundant granulations which bleed easily, no sinuses. Fungus of the tuberculous testis is also rare, the granulations are pale and soft, with numerous sinuses leading into the testicle.

5. In syphilis of the testicle the cord, seminal vesicles and prostate are not involved. In tuberculosis of the testis these organs are almost invariably implicated. Heiberg's statistics show that in the 13 cases of primary tuberculosis above referred to the seminal vesicles were involved in 8 cases, the prostate in 11; in 23 secondary cases the seminal vesicles were affected in 14 cases, the prostate in 15.

6. Hydrocele is almost constantly associated with syphilis of the testicle; in tuberculosis of the testis in not more than one-third of the cases.

7. In both forms the development is slow and insidious, the

diseased organ insensitive and the entire process is indolent and aphlegmasic.

OSSEOUS LESIONS.—As my paper has already extended beyond the proposed limits, I shall only endeavor to indicate in the most general way a few of the more characteristic diagnostic points of syphilitic and tuberculous osteitis. In the first place it may be said that the *localization* of the lesions constitutes an important diagnostic feature, as each disease exhibits marked preferences for certain portions of the bony system.

1. Syphilis exhibits a marked predilection for the long bones; its habitual localization is in the diaphysis and almost always at its terminal extremity. Tuberculosis is almost exclusively seated in the epiphyses, rarely affecting the shaft.

2. In syphilis there is a marked enlargement of the bone by more or less voluminous osseous tumors or hyperostoses, with little or no involvement of the soft parts; in tuberculosis the tumefaction is due less to increase in size of the bone than to cedematous infiltration of the soft structures.

3. In syphilis there is little tendency to suppuration and necrosis; in tuberculosis the pyogenic tendency is marked.

4. In syphilis osteocopic pains, with tendency to nocturnal exacerbation, is a pronounced feature; in tuberculosis the pain is dull and heavy, not aggravated at night, sometimes there is entire absence of acute painful symptoms.

5. The osseous lesions of syphilis rarely react upon the general system, while those of tuberculosis often determine a marked impairment of the general health, grave complications, hectic fever, cachexia, etc.

As already intimated, when the patient first came under observation there was a large globular swelling of the elbow joint constituting a condition known as the *pseudo-tumeur blanche syphilitique*. The morbid process instead of being localized in the shaft of the bone, its usual seat, was determined toward the epiphyses, affecting the articular extremities and associated probably with thickening of the periarticular fibrous tissues. In addition to the augmentation of volume of the joint structures there was a prominent hyperostosis of the distal end of the radius, traces of which may still be seen. The bony swellings could be distinctly mapped out beneath the skin, which was unaltered. The resemblance to white swelling of tuberculous origin was emphasized by the pseudo-ankylosis of the joint and the limitation of movements. In true white swelling, however, the parts are hot, swollen and cedematous,

soft and boggy to the feel, painful on pressure at certain points, with marked evidences of constitutional disturbance. It is a matter of regret that the type of osseous lesions so characteristically shown in this case was not preserved in a photograph. Fig. 1, sent me by Fournier, admirably illustrates an analogous condition of the knee-joint.

DACTYLITIS.—A valuable feature of differentiation between syphilitic and tuberculous bony affections is that in syphilis the



FIG. 1.

swelling is caused by an increase in the size of the bone with little involvement of the integrity of the soft parts, while in tuberculosis there is relatively much less increase in the bone, the volume of the swelling being due to the oedematous, infiltrated peripheric tissues. An exception to this is seen in a special form of tuberculous known as *spina ventosa* or tuberculous dactylitis.

By the kindness of Dr. Fordyce I am able to present photographs of two cases, one representing an example of

syphilitic, the other of tuberculous dactylitis, with the following brief notes:

DACTYLITIS SYPHILITICA.—Photograph by Dr. Piffard. (See Fig. 2.) G. F., aged 12 years; father and mother living, aged 52 years. Three children in family; oldest aged 23 years. All well.



FIG. 2.

One year ago a sore appeared below right ear which has discharged pus at various times since.

Eight months ago the metacarpo-phalangeal joint of the right index finger enlarged, followed by enlargement of the first phalynx of the left thumb and forefinger, then of the second phalangeal joints of the middle and ring finger. Seven

months ago the right ankle was so swollen that he was obliged to remain in bed five weeks.

Examination revealed an enlargement of the first phalanges of the left thumb and forefinger and the right forefinger; second phalanges of the left middle and ring finger. Scars of old sinuses about the enlarged bones. Left wrist and right elbow enlarged.

Below, and posterior to right lobule, an old sinus leading to a superficial abscess cavity looking like the skin lesions in scrofuloderma; scar of old sore below right inner malleolus of tibia and on outer side of dorsum of right foot. A tender spot on inner side of right leg, just below head of the tibia.

Has been a patient in the Bellevue Out-Door Department since the middle of July, 1891, during which time a marked improvement has taken place under the use of mercury and iodides.

The joint swellings have diminished at least one-half in size.

Patient has gained in weight and color.

DACTYLITIS TUBERCULOSA.—(See Fig. 3.) The patient, a young man, aged 18 years, presented no evidences of syphilis—hereditary or acquired—and gave no history which would point to such an infection.

Two years ago the right ring finger was amputated for the same condition which he now presents on his left ring finger—a fusiform swelling of the first phalangeal joint. The joint enlargement has existed for six months and has proved rebellious to anti-syphilitic remedies.

Physical examination revealed a consolidation of the apex of the left lung.

That form of syphilitic dactylitis due to gummons infiltration of the superficial tissues or periostum, is not so liable to be confounded with tuberculous dactylitis, but in the deeper form, when the gummons deposit is seated beneath the periosteum or in the medullary canal, the differentiation from the tuberculous type is often extremely difficult. In both diseases the development is slow and indolent. In both the localization may be identical, the proximal phalanx being most frequently affected, but any or all of the phalanges of one or several fingers may be the seat of the disease; multiplicity is more characteristic of the syphilitic type. In both there is more or less articular stiffness.

In syphilitic dactylitis the integument is often inflamed and reddish, the swelling hard, firm and symmetrical, assuming an acorn or fusiform shape, and showing little tendency to supuration and ulceration.

In tuberculous dactylitis the integument is thickened, bluish-

red or livid in color and often streaked with sinuous veins, the swelling is balloon-shaped but not as a rule so symmetrical as in syphilis, it terminates more abruptly and is often marked by a lump or nodule at the side which suppurates and ulcerates, giving exit to cheesy pus, the sinues leading to dead bone or into the enlarged medullary canal.



FIG. 3.

I have thus indicated briefly the more salient points of difference in the objective physiognomy and the clinical course of certain manifestations of syphilis and tuberculosis. By bearing in mind the semeiological elements peculiar to each morbid type, it is possible, in a majority of cases, to differentiate between them and assign to each diathesis the lesions which they respec-

tively determine. Still, in many cases we must institute a careful inquiry into the history and pathological coincidences in order to clear up the doubtful nature of the lesions. A clear syphilitic history and the presence or antecedent marks of specific lesions would, of course, constitute strong *prima facie* evidence of their syphilitic nature. So, likewise, tuberculous lesions of the lungs or other organs would afford presumptive proof of their tuberculous origin. In many cases, however, the history fails or is lacking in elements of positive value, and recourse must be had to the test of treatment.

66 West Fortieth St.

OBSERVATIONS ON THE SYPHILITIC CACHEXIA.¹

BY

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Physician to Charity Hospital.

ALTHOUGH syphilis has been for centuries a familiar disease, the essential nature of the poison is yet undiscovered.

As a corollary to this want of knowledge, the successful treatment of this protean malady remains to this day dependent alone upon the fanciful therapeutics of each individual practitioner, for it is a well-established fact that in order to treat disease with any degree of certainty the physician should fully comprehend not only the effect he aims to achieve, but also the nature of the malady he is called upon to treat. Syphilis is characterized by a period of incubation and (except in case of inheritance) by certain changes at the seat of contagion and in the proximate lymphatic glands. One cause alone can give rise to this specific, contagious, non-infectious disease; namely, the absorption of the virus into the current of the circulation through the glandular system, by a recognized process of slow diffusion.

Specific diseases ordinarily exhibit a peculiar affinity for certain tissues and organs of the body, but after the initial manifestation of syphilis with its accompanying adenopathy every structure of the body may, in course of time, be attacked.

¹ Read before the American Association of Andrology and Syphilology. Second Triennial Meeting of the Congress of American Physicians and Surgeons, Washington, D. C., September 22-25, 1891.

Though the subcutaneous connective tissue usually receives the earliest and fullest force of the contamination, bone, muscle, blood vessels and the internal viscera are soon made to suffer and even the placenta has been found subject through it to degenerative change. If not checked in its inception a host indeed of consecutive ills may ensue, leading to a greater or less degree of constitutional taint by which the unfortunate subject is made to suffer endlessly through life, if it does not quite soon, by the establishment of a pernicious cachexy hasten him to an untimely grave.

After infection by syphilitic disease we can look with hope for no aid from nature by spontaneous resolution as occurs in so many other maladies. The mischievous element once introduced into the composition of the fluids and structures of organic life usually continues its evil course until forcibly stopped by some sufficient antidotal impediment, indeed until, paradoxical as it may seem, the potent aid of a deleterious agent in nature and art is invoked "to help the giant in prison work his way out."

We may recognize with Rokitansky that the deposit in Peyer's patches in enteric fever, is but a mode of eliminating the typhoid poison; with Simon that cancerous tumor and ulceration are eliminative efforts on the part of nature; with Aitken that the sour and offensive sweats in rheumatism aid by removing lactic acid poison; with Bennett that crisis by sweat or stool brings mitigation in pneumonia; with Prof. Geo. Johnson that gastro-intestinal excretion in cholera is salutary and even with Todd, that benignant eliminative explosions take place during every convulsive paroxysm in epilepsy; but the boasted "*Vis Medicatrix Nature*" seems powerless to interfere, pertinently, in the presence of the peccant humor of syphilis inoculated into the system of a susceptible subject.

The opinion that certain temperaments are less prone than others to put on the cachectic livery of this disease, has been very widely entertained. Experience, however, tends rather to prove that no particular temperament enjoys an absolute immunity from the deteriorating influence of this disease. It is quite familiar to us that patients suffering from any form of scrofula or tuberculosis, or whose kidneys are in any manner diseased at the time of infection, suffer most severely from the ordinary consecutive accidents of syphilis, and it is in reference particularly to this class of cases that my remarks are intended to apply. In the presence of any inflammable diathesis, such as I have named, the

functions of digestion and assimilation are already enfeebled, and the administration of drugs by the mouth to combat the disease cannot but intensify their disturbance. Cases of syphilis, however, do sometimes present themselves in too advanced a stage of syphilization to endure any heroic form of treatment. I have been in the habit of ordering such cases to proceed on a long sea voyage hoping thereby to arrest destructive waste of tissue and strength. Recuperative energy may often thus be nursed until a condition favorable to the reception of special treatment can be substantiated.

When the cachexy of syphilis is found grafted upon another vice in the same constitution, the treatment must necessarily partake of a mixed character in deference to the nature of both evils.

To meet this requirement, therefore, it becomes necessary to have recourse to remedies which not only will prove useful as direct tonics, enriching the blood and supporting the failing vital powers, but such also as act through the glandular system, stimulating its functions and promoting elimination of morbid products with which this system is especially infiltrated.

Assimilation is too slow and uncertain in this class of cases to rely upon the stomach; therefore, the best method of obtaining the effects of appropriate correctives is by the hypodermic process of medication through the absorbents to the general system. The special absorptive powers of the lymphatic system have been too clearly established by the renowned Alexander Munro and subsequently confirmed by Hunter, to admit of any doubt, on our part, of its ready and beneficent co-operation.

As energetic entrophics I have found, after long and careful investigation, no remedies equal to the double chloride of gold and iodide of manganese, administered in combination, hypodermically.

The eminent therapeutic value of the salts of gold in the cachexia of syphilis was strongly advanced by Christien, 1819, and a marked estimate was subsequently placed upon their effect in the debilitating physical conditions resulting from this disease, by a large number of distinguished authors. Pitcairn and Neligan asserted that the chloride of gold, while identical in its effects with mercury, appeared to exert, however, a more decided influence on chronic syphilis. Chavannes, in 1848 and 1849, especially referred to the chloride of gold as a remedy of rare virtue in the later stages of syphilis, both internally and locally.

T. Launder Brunton¹ found, on experimentation with the chloride of gold, that it encouraged the appetite when administered in small doses, and the distinguished Aronowitsch, conducting his experiments carefully, found that the gold preparations were powerful eutrophics, and in warm blooded animals improved the physical condition and increased their weight.

Bartholow² greatly extols the efficacy of the gold preparations in constitutional syphilis and advances the very important observation that they are singularly apt to undergo decomposition in the alimentary canal, a part only being absorbed as an oxide in combination with albumen. MM. Hannon and Petrequin consider the manganese particularly suited to the anæmia, resulting from debilitating diseases, especially the cachexy of syphilis and tuberculosis, and my own experience with the combined salts of gold and manganese in these two affections, has proven them especially advantageous remedies when administered hypodermically. The effects which I have observed have been first exhilarant, followed sometimes by an increase in animal heat and generally by an increase in vital activity. The pulse is more full and active, the appetite increases and the patients, after a few injections, gain in bodily weight.

Some cases presented an idiosyncrasy and in these there resulted chill, subnormal temperature, headache, diplopia, dizziness and nausea. In such cases minimum doses should be administered or the salts of platinum substituted for those of the gold.

The hypodermic administration of these remedies is facilitated by their combination in fluid form, and I therefore have used glycerine as a solvent. The fluid requires some care in its preparation to avoid a precipitation of some of its ingredients with a consequent lessening of its therapeutic value, and I have, therefore, had it prepared by two competent chemists, Messrs. C. F. Lord, 482 Seventh avenue and W. E. Cramer, Park avenue and Seventy-third street. Each drop of the fluid contains gr. $\frac{1}{50}$ of the double chloride of gold and iodide of manganese, the ordinary initial dose, and is best administered in five minims of a 1 per cent. solution of carbolic acid. This dose, or two drops, may be repeated every other day or twice a week, and should be injected in the dorso-lumbar region, alternating the sides. There is no pain attending the injections and,

¹ Pharmacology, Therapeutics, and Materia Medica.

² U. S. Dispensatory.

though some of my patients have received as many as forty and fifty injections, not the least irritation of the tissues has resulted in any individual instance.

I placed under this treatment two cases of locomotor ataxy of a very obstinate nature, after they had exhausted every other form of treatment for their relief. Both presented a marked cachectic appearance and gave specific histories. Neither could walk without canes, and ascending stairs without assistance was impossible. Neuralgic pains in the lower extremities were severe, and in one of the cases muscular spasms were of frequent occurrence and particularly painful. Nutrition in both cases was deficient, associated with loss of appetite. Both had been under the care of eminent neurologists who had tested the suspension treatment, without ameliorating their condition in the least. Under the gold and manganese injections there has been a decided improvement—co-ordinate movement in one case being restored, and in the other so much improved that he walks with but slight assistance from his cane, and the neuralgic symptoms are relieved. In both cases the appetite has returned, and the general condition of the patients markedly improved. I will not consume more of your valuable time with a detailed account of the symptoms and progress of these cases at present, but content myself with the allusions to them thus far made.

1013 Madison avenue.

THE USE OF NITRATE OF SILVER IN URETHRAL INFLAMMATIONS.¹

BY

RAMON GUIERAS, M.D., NEW YORK.

IN preparing this paper I am aware that I am treading upon a ground which has always been considered dangerous, and which as a treatment may appear to you as uncalled for and severe, but as yet I have not seen a single case which has been at all injured by it; whereas, all, with perhaps one exception, have been distinctly benefited.

Nitrate of silver, some fifteen to twenty years ago, was very much used as an astringent injection, of the strength of about one-fifteenth grain to the ounce, and with very

¹ Read before the Section in Genito-Urinary Surgery, New York Academy of Medicine, November, 1891.

good results. It was, however, supplanted by sulphate of zinc, acetate of lead and other astringents, on account of the irritability which it seemed to set up in certain urethras. It had, however, its advocates, and was used especially in the so-called abortive treatment of urethritis. This was advocated in France, chiefly by Diday, who used to inject two syringefuls of a ten to fifteen grains to the ounce nitrate of silver solution, or else make applications on a sponge through a cannula of the same strength. In this country it was advocated principally by Bumstead, who first put his patient to bed and then injected about one dram of a sixty grains to the ounce nitrate of silver solution. He then treated his patients with cold applications and diluents. This often brought about good results, the inflammation subsiding in a few days. In some cases, however, strangury and periurethral inflammations were set up. Another method was to inject a one-sixth grain of nitrate of silver solution at frequent intervals, until the desired effect was produced. This abortive treatment has gradually fallen into disuse, however, and is at the present day only heard of as ancient history. In acute cases of urethritis to-day it is not used excepting in those cases of prostatic inflammation known as gonorrhœal cystitis, or gonorrhœa of the vesical neck, in which the prostatic portion of the urethra is involved. In these cases it seems, according to the various authors, to work like a charm. Keyes (*Annual of the Universal Medical Sciences*, 1888), in speaking of the treatment of posterior urethral inflammation by nitrate of silver solution, said, "this has yielded the best results in gonorrhœal cystitis, and the more acute the attack the better." He uses five drops and repeats in from two to eight days. Strength, one-half grain or more to the ounce. Brewer, of this city, who greatly favors this treatment, has just reported four cases before the Academy, in the first two of which he cured the disease in six and two applications, respectively. In the first case he began with two and one-half grains to the ounce, and ran it up to fifteen grains, injections being given every second day. In the second case he injected a solution of five grains to the ounce for two consecutive days, with perfect results. Allen, of Boston, has reported similar cases, in which he began with a one per cent. solution and ran it up to a four per cent., with equal success.

By far the greater number of cases to-day in which nitrate of silver is used is in those cases of posterior urethral inflammation, where generally a slightly granular condition exists.

These may occur either in the membranous or prostatic portions, and are accompanied by various symptoms, such as a gleet discharge, pain after micturition, a sense of weight and heaviness in the perineal region, sometimes increased frequency of micturition, and many other unpleasant manifestations. In those cases deep injections are given of two drops or more of nitrate of silver solution, beginning with one grain to the ounce or less, and increasing the strength every two to eight days, until the symptoms have disappeared. This will generally happen in from three to fifteen applications.

Ultzmann, the father in Germany of deep injections, instilled from two to five drops into the membranous portion of the urethra. The strength was generally from 1 to 3 per cent. His syringe, which is the one generally used, consists, as you all know, of a small glass syringe holding about twenty-five drops, and a hollow silver sound about seven inches long.

Mercier, of Paris, who begins with one to two grains to the ounce, and runs up only to three or four grains, says that the syringe has no bearing in the case, and shows that all fluids injected in front of the membranous portion will run out the meatus and all beyond will run into the bladder, being acted upon accordingly by the "cut-off" muscle.

Guyon, of Paris, recommends the use of these injections with his own instrument, which consists of a small syringe to which is attached a flexible catheter with an acorn bulb so arranged that the solution may be deposited drop by drop at the desired locality.

R. W. Taylor injects about ten drops of a two to five grains to the ounce solution of nitrate of silver into the prostatic portion, while drawing the shaft up into the membranous portion.

Keyes, on the other hand, throws from one to five drops into the centre of the prostatic portion. At present, however, I believe he injects a syringe-ful of the fluid. Keyes has a syringe of his own, which has a larger shaft than Ultzmann's, and is made of solid silver. He recommends a solution of from one-half grain to sixty grains to the ounce. His associate, Dr. Fuller, mentions a case in which a solution was used of sixty grains to the ounce of nitrate of silver, injected into the membranous portion of the urethra in a man of about forty years of age. This was the only application that could quiet the irritability in that region, and a single injection was often sufficient to accomplish this purpose for several months. This man, dying afterwards of some intercurrent trouble, Dr. Fuller cut out his

membraneous urethra to see if so strong a solution had caused any stricture. He found it, however, perfectly normal.

The use of nitrate of silver solution in the anterior urethra is generally applied to cases of circumscribed or localized urethritis, which have been discovered by endoscopic examination. As the folds of the urethra fall together, while withdrawing the endoscope, any little areas of congestion, papillomatous growths, ulcerations, erosions, granular inflammation, engorged blood vessels, etc., can be seen and touched with the nitrate of silver through the tube by means of the stylet and a piece of cotton.

The Otis-Alexander endoscope, used with Dr. Klotz's tube, is, I believe, at the present date, the most popular one.

Dr. F. Tilden Brown, of this city, has also perfected some wire bivalve endoscopes, which are very ingenious and practical.

Dr. White, of Philadelphia, recommends passing a sound into the urethra and feeling along it for points of tenderness, and in case he finds any, to inject there a drachm of a one-half to one grain to the ounce nitrate of silver solution. This can be increased if well borne. He says that the surgeon should make the first two injections, and after this the patient can make them.

Thus, having considered the various methods and ways now in vogue of treating urethritis, and happening to have had some severe cases of gonorrhœal ophthalmic which had yielded well to treatment of nitrate of silver and boric acid solution, I conceived the idea of trying the same treatment in urethral gonorrhœa. I accordingly began to inject some cases of gonorrhœa with a ten grain to the ounce solution of nitrate of silver, and gave them a saturated solution of boric acid to use at home after each micturition. This seemed to work well in some cases, while other cases complained of severe burning feeling. I accordingly determined to begin with an injection of a one grain to the ounce solution and run up a grain a day, giving them at the same time a mildly astringent injection to use at home three times a day. This I did with quite good success, running up sometimes as high as fifteen grains to the ounce; although most cases were cured with from five to ten injections. This seemed to show that a certain tolerance could be established. In selecting my cases for this method of treatment, I always tried to pick out fresh cases. While I do not think that the effect of this method of treatment is an abortive one, I certainly think that it modifies the intensity of the inflammation.

In preparing the paper for to-night I have cited a few cases which I have treated in the Roosevelt and New York dispensaries, which will suffice to give some idea of its efficacy, and from which I will endeavor to draw certain conclusions.

Case I.—"J. D.," age 19; urethritis of six days' standing; discharge profuse; urethra very much congested. Treatment: Solution of nitrate of silver, one grain to the ounce, followed by injections of borax, glycerine and water. Second day, not much change; used solution of two grains to ounce. Third day: discharge much less; solution of three grains to ounce. Fourth day, discharge still less; solutions four grains to ounce. Fifth day, returned; no discharge.

Case II.—"B. M.," age 22 (Russian); third infection; urethritis of two or three days standing; discharge moderate; urethra congested. Treatment: First day, injected a solution of two grains to the ounce, and gave a simple astringent injection. Two days later returned cured. Note.—This was evidently a case of simple urethritis.

Case III.—"W. R." Urethritis; second infection; ten days standing; great deal of phimosis; prepuce œdematous; profuse purulent discharge; complained of severe chordees. Treatment: First day, injected a two grain to the ounce solution. Second day, injected solution of four grains to ounce. Third day, injected solution of six grains to ounce. Fourth day, injected solution of eight grains to ounce. Fifth day, injected solution of ten grains to ounce. Up to this there had been very little change in the amount of discharge or in the character of the micturition. The swelling, however, had almost entirely disappeared. Sixth day, discharge very slight; no more chordees; no pain on micturition. Injected a solution of twelve grains to ounce. Seventh visit, no discharge except in morning. Injected a solution containing ten grains to the ounce. Two days later returned cured. Note.—This was a very acute case of urethritis, and was accompanied by great swelling and œdema of the surrounding tissues; just the case where we would dread most the use of nitrate of silver. Mild injections were given in connection with this.

Case IV.—"S. S.," age 24 (Russian); first infection; urethritis of six weeks' standing; discharge moderate. Treatment: First visit, injected solution of two grains to the ounce. Second visit, injected solution of four grains to ounce. Third visit, injected solution of six grains to ounce. Fourth visit, injected solution of eight grains to ounce. Fifth visit, injected solution of ten grains to ounce. During this time the discharge had been growing less, and no unpleasant symptoms had followed the injections. Sixth visit, discharge had ceased. Two days later returned with no recurrence, and was discharged as

cured. Note.—This was not the type of case desired. I took it, however, as the only new case that day.

Case V.—"L. S." Urethritis; first infection; duration, one week; discharge profuse; parts congested, but not much swollen. First visit, injected a two grains to the ounce solution. Second visit, discharge much less; injected solution of four grains to the ounce. Third visit, no discharge; ordered to continue mild injections at home for a few days. Two days later returned, saying that discharge had begun again; injected a solution containing six grains to the ounce. Fifth visit, profuse discharge; injected an eight grains to the ounce solution. Sixth visit, still profuse discharge; injected a solution of ten grains to the ounce. Here I lost track of the case. Note.—In this case after the discharge had ceased, I think that at its reappearance I should have begun again with a one or two grain to the ounce solution.

Case VI.—"J. M.," age 18; second infection; duration eight days; urethritis, with a profuse purulent discharge and considerable congestion. Treatment: First visit, injected a solution of one grain to the ounce. Second visit, discharge a little less; injected a solution of two grains to the ounce. Third visit, discharge much less; injected a solution of three grains to the ounce. Patient said that discharge had ceased, but examination revealed a drop of pus. Injected a solution of four grains to the ounce. For two days after this he came with the same story, but a little discharge was always found. Treatment discontinued. Patient discharged, with order to use astringent injections at home.

Case VII.—"C. H.," age 28. Duration, four days. Patient was a flabby looking individual of the fat, scrofulous type. The urethritis was very acute. Parts much swollen, turgid and oedematous. Treatment: First visit, injected a two grains to the ounce solution. Second visit, reported bleeding after first injection. Discharge profuse. Injected solution containing four grains to the ounce. Third visit, discharge much less. Solution of six grains. Fourth visit, no discharge. Fifth visit, again very profuse. Injected a solution of eight grains. Sixth visit, still profuse. Injected a ten grains to the ounce solution. Seventh visit, discharge had stopped for almost twenty-four hours, then reappeared. Injected solution of twelve grains to the ounce. Eighth visit, still profuse. Injected a solution of fourteen grains to the ounce. Here I left the dispensary and case. If any case should have suffered from complications it was this one. He seemed to benefit by the injections, however.

Case VIII.—"S. D." Age 17. First infection. Duration one week. Discharge quite profuse; not much congestion or oedema. Treatment: First visit, injected solution of two

grains to the ounce. Second visit, discharge less. Injected solution of four grains to the ounce. Third visit, discharge very slight. Injected solution of six grains to the ounce. Fourth visit, worse. Quite an amount of swelling. Injected an eight grain solution. Fifth visit, about the same. Injected a ten grain solution. Here I left the dispensary. Note: This was the only case in which the silver seemed to irritate, and in this case only after injecting the eight grains to the ounce solution.

Case IX.—"M. H." Urethritis of five months' standing. Discharge quite profuse. This was not the kind of a case that I was looking for, and I only injected him at his own solicitation. First day, injected solution of eight grains to the ounce. Second day, same treatment as first. Third day, returned cured. No return.

From these cases we can draw the following logical conclusions:

1. That nitrate of silver is not as dangerous in acute urethral inflammations as is generally supposed.

2. That by beginning with small doses and increasing daily a tolerance can be established (the same as in chronic cases).

3. That although a solution of the strength of fifteen or twenty grains to the ounce can be reached in this way, that it is not wise to go above eight or ten grains; and then if the result is not favorable to continue with some other means.

4. That in this, as in bichloride irrigations, and all other methods which try to cure this trouble quickly, a dry, congested and slightly irritated condition is liable to follow, which should be treated for some days by mild astringents, these to be left off gradually.

5. That when the discharge becomes very slight, it is better at times to decrease the strength of the arg. nit. than to increase it.

6. That in cases of gonorrhœal cystitis, which are usually acute, good results are obtained by instillations of this drug.

7. That in cases of chronic deep urethral inflammations, especially those of a granular nature, deep urethral injections are the remedy *par excellence*.

8. That nitrate of silver as an abortive should not be used, as in doing this periurethral inflammations may be set up, which might cause considerable trouble.

107 West Fifty-fourth street.

NOTE.—You will notice in the cases whose clinical histories I have cited above that most of them were treated at first by a two-grain silver solution, and that it was increased in strength two grains a day. In these cases I have not had as good results as in the ones

A CASE OF LICHEN SCROFULOSORUM.¹

BY

JOSEPH GRINDON, Ph.D., M.D.

Clinical Professor of Diseases of the Skin, St. Louis Medical College.

MISS N., aged 21, of American birth but of English parentage on both sides, has enjoyed from her birth all those physical advantages which an intelligent solicitude combined with wealth could procure, such as wholesome food, the best of medical advices, frequent visits to sea-side and other health resorts, etc. Her parents are strong and healthy, except that her father has had an obstinate eczema (?) on the temple for years. Nevertheless, patient is thin, sallow and delicate, suffers from dyspepsia, habitual constipation and insomnia, and has had a troublesome laryngeal cough for some five weeks, for which she is now being treated by a specialist. She has reduced in weight in the last year from 125 to 105 pounds. An excessive perspiration, with which she has for many years been troubled, has of late become still more profuse. Patient constantly feels weak and exhausted. I can find, however, no evidence of bone, gland or lung tuberculosis.

The complexion is muddy. There is dandruff distributed generally over the scalp, which is a little more hyperæmic than usual but not itchy. The hair is oily in spite of frequent washing with alkalies. The skin is somewhat rough. On the right cheek are two small obscure papules undergoing involution.

The lesions for which she consulted me have existed for a year but have been worse for the last month. They are located on the back. The picture presented on examination of this region is an exact likeness of a small military papular syphilide; the lesions vary in color from a shade a little deeper than that of the normal skin to a dark red. They form groups and parts of circles or combinations of circles. In one place is a perfect letter S formed by the fusion of two half-rings of discrete papules. Nowhere do the lesions coalesce into patches. They are firm, without areolæ, most of them pierced by a lanugo hair, and many of them bear a semi-detached epidermic scale.

which I treated by the one grain method of progression. I quoted them, however, as they were more recent, more carefully watched, and contained fuller notes than the others. The cases that I treated by the one grain method were principally among Italian laborers, who were sojourning in the city during the winter months. In about seventy-five per cent. of these the treatment was successful, stopping the discharge in from one to two weeks. In the remaining cases the discharge was gradually lessened and the patients were put on other varieties of treatment, generally astringent injections. In connection with the arg. nit. treatment I have always given them mild astringent injections to use at home.

¹ Read before the American Dermatological Association, Fifteenth Annual Meeting.

Their distribution is similar to that seen in a figure accompanying Dr. Gottheil's report of a case in the *Jour. of Cut. and Ven. Dis.* for 1886, p. 133, that is, there is a patch of lesions covering each scapular region, with a band or bridge connecting the two patches above. A few acne papules and pustules are also to be seen on the back, shoulders and upper arms.

During the months preceding her coming to me, patient had taken a course of baths at Hot Springs, Ark. These apparently had the effect of increasing the vascularity of the lesions, changing them from a light to a dark red and of developing pruritus in them. At the same time a dysidrosis appeared on the palms, characterized by the development of a small pruritic erythematous spot which soon became the seat of a vesicle, the process terminating in slight desquamation with occasional pigmentation. A few flattened miliary vesicles with some reddened scaling, or slightly pigmented spots are still to be seen about the volar surfaces of hands and fingers. The feet have remained free.

Oleum morrhue was prescribed internally. Patient presented herself again a few days later, on which occasion the lesions were somewhat lighter in color, perhaps owing to discontinuance of the hot baths. She left the city soon after and I did not see her again.

I have put the case on record because of the infrequency of the disease, but one other case having been observed in St. Louis (by Dr. Hardaway): because the patient's age and sex are not as usually found in this affection, and because of the further departure from the rule in that the patient is of good family history, has ever enjoyed the best of hygienic surroundings, and although in poor health cannot be described as strumous.

A NEW FORM OF ELECTRIC URETHROSCOPE.¹

BY

WILLIAM K. OTIS, M.D.

THE introduction of the electric lamp as the source of illumination has given urethroscopy an impetus which places it among the front rank of our methods of diagnosis of urethral disorders and enable us to note with far greater exactness than ever before the pathological changes occurring in urethral mucous membrane, a knowledge of which

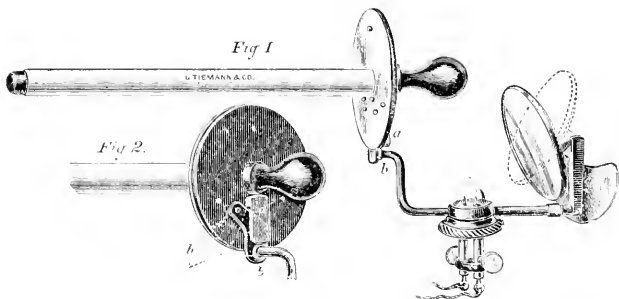
¹ Exhibited before the American Association of Andrology and Syphilology, Washington, D.C., September 22, 1891.

is so necessary to intelligent and satisfactory methods of treatment.

The new urethroscope should not be regarded, however, as a usurper, trying to crowd from the field the older methods of diagnosis and treatment, but rather as an ally bringing an additional sense to our aid and rendering existing methods still more certain and efficacious, while in special instances it is the only means by which a cure can be effected.

The development of the electric urethroscope had been due largely to the efforts of Mr. Josef Leiter, of Vienna, though the idea was not original with him and the form of lamp which rendered it possible was certainly the outcome of American ingenuity. His instrument is entirely satisfactory as far as illumination is concerned and a great advance in every respect over those which preceded it, yet still possesses the disadvantages of being heavy, complicated in construction and consequently expensive.

To overcome these objections I have devised an instrument of but *one-sixth* the weight of that of Leiter, giving more room for the introduction of instruments and extremely simple in construction.



This instrument consists of a small concave mirror which a stout wire about two inches in length connects with the proximal end of the urethroscopic tube. Midway on this wire is attached a small Edison electric lamp, a semi-circular screen being placed immediately behind the mirror to cut off extraneous rays of light.

The rays of light from the lamp falling on the mirror are

reflected down the tube and the illuminated field is easily observed by an eye looking over the top of the mirror.

This instrument has been ingeniously adapted by Dr. F. Tilden Brown¹ to his urethral speculum and would, in like manner, be equally serviceable with any of the various forms of specula in general use.

After several years of experimentation in attempts to improve upon the urethroscopic tube, I am forced to the same conclusion as my friend Prof. Samuel Alexander² that the best tube for this purpose is that of Dr. Herman G. Klotz of this city, and this is the one which I now use in all ordinary examinations. It is the simplest form possible and having no funnel at its proximal end, allows of a gain of nearly an inch in distance over that used by Desormeaux.

Prof. Alexander attaches my illuminator to this tube by screwing its distal end into the plate of the tube, but I have subsequently adapted my instrument to this form of tube by placing at the distal end a small flat foot at the outer extremity of which is a smooth pin. This pin fits into a hole in the tube plate and on revolving the instrument a quarter circle, the foot swings under a shoulder riveted to the plate and is securely fastened. This joint is firm and easy of manipulation, readily allowing the illuminator to be attached or removed at any time during the examination. Those who prefer the Desormeaux tube will find the sliding joint with which the instrument was originally made, simple and satisfactory.

5 West Fiftieth street.

Society Transactions.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY.—JANUARY 14, 1892.

DR. R. W. TAYLOR, *President, in the Chair.*

DR. C. W. ALLEN presented a man, 35 years old, a Swede, and a sailor by occupation. On January 1st, while carrying a heavy plank, the patient met with an accident, receiving a blow in the scrotal region. The blow was not a severe one, but the man afterwards noticed a reddened swelling in that region, and felt constant pain. He first came under observation on

¹ Journal of Cutaneous and Genito-Urinary Diseases, July, 1891.

² Journal of Cutaneous and Genito-Urinary Diseases, August and October, 1891.

January 5th. He stated that he never had syphilis; had gonorrhœa two years ago. Upon examination the right testicle was found harder and larger than the left, and the right epididymis presented a hard tumor about the size of a fist. At the upper part there was an area of softness with the sensation of fluctuation. The tumor was treated by mercurial inunctions and by iodide internally, and the condition has greatly improved, with the exception that the softened area ulcerated through, with sloughing. Dr. Allen said that while there was a distinct history of trauma at the beginning of the swelling, he did not think that was the origin of the trouble.

DR. BREWER stated that the swelling appeared to originate in the epididymis; possibly there could be some trouble underneath that, but he saw no signs of it. One explanation of the lesion would be that the man had an enlargement of the testicle or epididymis, and that a superficial phlegma formed over it, which has left this ulceration.

DR. STURGIS thought the lesion was probably syphilitic; possibly tubercular.

DR. TAYLOR stated that the lesion did not have a syphilitic appearance. In traumatic or simple chronic epididymitis or orchitis it is not at all uncommon for a sinus to form, followed by ulceration and denudation. Nor is it uncommon for a simple phlegmon to ulcerate as speedily as in a syphilitic subject.

A Peculiar Accident During Litholapaxy.—DR. L. BOLTON BANGS read a paper with this title. Dr. Bangs stated that accidents occurring in connection with the operation of litholapaxy were not uncommon, but that they were usually confined to the bladder itself, or to the breaking of the instrument introduced. In this case, however, the accident was due to the stone. The patient was a man, 56 years old, who came under his observation last December. The man was in good health until six or seven years ago, when he began to experience difficulty in passing water. The symptoms became progressive, and for the past three years he was obliged to use a catheter. The pain was at times very severe. The urine occasionally contained blood and small calculi. Upon examination the stone was easily detected; it seemed to be rather more than the medium size. As the man was suffering from a chronic nephritis it was thought wiser to remove the stone by lithotomy rather than resort to cystotomy. The stone was seized and crushed, and then the evacuating tube introduced. Upon the re-introduction of the lithotrite for further crushing, the instrument met with a decided resistance in the prostatic urethra, which persevering efforts lasting for over half an hour failed to overcome. A supra-pubic cystotomy was then performed and a digital examination disclosed the fact that considerable hypertrophy of the middle and left lateral lobes of the prostate existed, and that a fragment of stone was lodged between the projection of the prostate and the posterior wall of the bladder. As the instruments were pushed in through the urethra they forced the stone against the posterior wall, giving a feeling of elastic resistance. The stone was dislodged by the finger and the man made an uneventful recovery.

DR. F. T. BROWN stated that he had been present during the operation when this curious complication occurred. It gave one an excellent opportunity of comparing the two methods of operation—litholapaxy and supra-

pubic cystotomy—and showed the advantages of the latter method over the crushing operation.

The Differential Diagnosis of Tuberculosis and Syphilis of the Joints and Genitals, and Certain Cutaneous Manifestations.¹—By DR. P. A. MORROW.

DR. TOWNSEND stated that he was very much indebted to Dr. Morrow for his valuable paper. Anything from the standpoint of the syphilologist as regards differential diagnosis, is of value to those working in the field of bones and joints. In lesions of these parts it is sometimes impossible to differentiate between the syphilitic and the tubercular. Dactylitis, which occurs in early childhood, may be due either to syphilis or tuberculosis. The symmetry of lesions may sometimes aid us in arriving at a diagnosis, yet there are so many cases that are neither characteristic of one disease nor the other. Going very carefully into the history of the parents will sometimes reveal a syphilitic taint. After the child gets older, it is not so difficult to make a diagnosis in joint lesions. As far as his experience goes, syphilitic bone lesions, such as osteitis or peri-osteitis, are then much more common than joint lesions. We seldom get joint diseases that are clearly syphilitic. As the child gets older, the diagnosis is rather between rheumatism and tuberculosis.

DR. FRANK HARTLEY spoke about the difficulty in making a differential diagnosis in certain joint diseases, such as tubercular hydrops, empyema or white swelling. There is a variety of joint inflammation—a peri-synovitis or gumma—which extends into the joint and gives no external signs. It may break down, and an empyema develops, or if it continues and cicatrizes, it gives rise to a foreign body in the joint. In the second stage of syphilis, if the character of the joint lesion is sub-acute, it is almost impossible to make the diagnosis. In the tertiary stage, where the involvement of the joint is secondary, the diagnosis is usually between sarcoma and gumma. Dr. Hartley stated that he has seen five cases of joints resected which were syphilitic. He gave the history of one case, a child, two or three years old, where both knees were involved, and there was a good deal of pain lasting about three weeks. The case was diagnosed as hereditary syphilis, and the child was put on blue ointment. A year afterwards the mother of the child presented herself with a gumma of the face and the child also presented certain syphilitic lesions, proving that the original diagnosis was correct.

DR. SAYRE stated that he had seen some cases in small children where there was grave doubt whether their Pott's disease was due to syphilis or tuberculosis. In young children, where there is disease of the vertebrae associated with other joint diseases, he considers it a wise plan to give the child the benefit of the doubt, and treat it for syphilis, while you are giving the inflamed joints rest. In many instances such cases will prove to be syphilitic. In some of these cases there has been a doubt whether the disease of the spine was rachitic or syphilitic or tubercular. The three sometimes run very close in their physical characteristics.

DR. BANGS stated that he was greatly interested in Dr. Morrow's excellent paper. He would only refer to one clinical point, namely, Dr. Morrow stated that about one-third of the cases of tubercular sarcocele are

¹ See page 140.

associated with hydrocele of the cord. Dr. Bangs said that in his experience, the proportion is greater than this. When there was fluid present in the tunica vaginalis, he considered it a point of diagnosis against syphilis.

DR. ALLEN agreed with Dr. Bangs as to the presence of hydrocele in tubercular disease of the testes. In differentiating between certain syphilitic and tubercular lesions, he thought that too much importance should not be attached to the fact that they are benefited by the use of mercury or potassium iodide. In tubercular disease of the testicles we often see a marked improvement following the use of anti-syphilitic treatment. He considered the one case presented by Dr. Morrow as tubercular and not syphilitic.

DR. FORDYCE stated that when the boy, who was presented by Dr. Morrow came under the speaker's observations six months ago, from the presence of certain skin lesions he was convinced that it was a strumous inflammation of the joint, but such marked improvement took place following the use of potassium iodide that he changed his mind. The multiplicity of the lesions pointed to their syphilitic origin. The boy, however, gave no history of hereditary syphilis.

DR. VANDERPOOL referred to the dentated condition of the bone at the epiphyses, in the diagnosis of early syphilis.

DR. MORROW, replying to Dr. Bangs' statement regarding the presence of hydrocele in disease of the testes, said that in mentioning this differential symptom he simply followed what has been generally accepted as the opinion of most authorities. His own observation of such cases has not been sufficiently broad for purposes of generalization. As to Dr. Allen's observation in regard to the beneficial effect of mercury and potassium iodide in tuberculous lesions, Dr. Morrow thought they did not have such an effect in the majority of cases. Perhaps in local tubercular lesions the mercurial ointment might be beneficial, but not the internal use of the drug.

DR. EDWARD L. KEYES was elected Chairman for the year 1892, Dr. Samuel Alexander was re-elected Secretary.

At the completion of the scientific portion of the programme, Dr. R. W. Taylor, the retiring Chairman, made a few appropriate remarks. He stated that in concluding the first year of the existence of this Section of the Academy, the members could congratulate themselves on having done good work, and on having chosen as their Chairman for the present year so eminent a man as Dr. E. L. Keyes.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

Treatment of Lichen Ruber Planus by Hydrotherapy.—Dr. Jacquet has already made several communications to the French Dermatological Society to demonstrate the good effects of hydrotherapy in lichen planus. He has just completed them by an article of much worth, which appeared in the *Semaine Médicale* of the 30th of September. He claims that the subjects of lichen planus are neuropathic, either by heredity or acquisition, that the affection develops in them after a decided physical or moral shock, or after a

series of shocks to the nervous system. According to him the appearance of the eruption is first preceded by a most decided nervous state, then by pruritus and that it is only afterward that the cutaneous lesions appear. These views have led him to adopt as an exclusive treatment for this affection hydrotherapy in its most sedative form; the tepid douche of two or three minutes duration followed by a cold effusion of very short duration, and all with the least amount of shock. These procedures are to be carried out daily. He has thus treated seven cases, among which six followed no other method of cure, either internal or external. He simply recommended them to abstain from wine in its purity, liquors and coffee. Out of six cases three are now (December 30th, 1891) completely free from eruption. It required an average of twenty-five days to obtain this result. Two of the patients were the subjects of an intense generalized lichen planus. The other three are at the beginning of their treatment and are already markedly improved. Ordinarily the symptoms of nervous excitability disappear from the first douches.

Treatment of Leucoplasia.—It is well known that we call in France by the term *leucoplasie* a quite frequent affection of great practical importance, for it is often painful and can end in epithelioma. It is objectively characterized, 1. By the development at certain points on the mucous membrane of the mouth but especially in the dorsal surface of the tongue, the internal surface of the cheeks, and lips—occasionally in the uvula, of whitish plaques more or less pearl colored and thickened and of extremely slow evolution. 2. By a superficial alteration of the subjacent mucous membrane, which undergoes a process of chronic inflammation. This is the affection which has been denominated *leucoma* in England *leucoplakia buccalis* by Schwimmer, *leucokeratose* by Besnier, etc. Dr. Perrin has again taken up his study of the question from a practical point and has arrived at the conclusion that the best line of conduct in a given case consists in destroying the patch surgically, even before there is the least indication of transformation into epithelioma, the surgical treatment even in the absence of all ulceration is according to him much superior to all topical applications, and gives the greatest security. One must with the thermocautery or the galvanocautery remove all the white patches, making a dissection or a decortication of the mucous membrane. Thus one prevents the formation of new plaques and a firm cicatrix results.

Treatment of Lupus by Scraping.—This is an ancient method and one of the first surgical procedures advised for the treatment of lupus. Dr. Broca has recently revived it in applying to it all the perfection of modern surgery—upon a patient who had been sent to him by Dr. Besnier, who had an enormous tuberculous lupus of the back of the foot and the whole interior portion of the leg and the calf. He practiced scraping in a single seance under chloroform and despite the great extent of surface laid bare he obtained cicatrization in three weeks time and this without an elevation of temperature above 37.2°C. and without the least suppuration. He uses the curette energetically upon all the soft tissue removing all that is friable, making compression as he goes over the operated surface by means of antiseptic tampons. As soon as hæmorrhage is arrested he covers over the parts with sterilized compresses, then touches the surface with chloride of zinc, ten per

cent., and ends with a dressing of iodoform gauze. He has treated two other cases in the same manner and with apparently good results. Unfortunately those are only surface cures especially when we have lupus of the face to deal with, in these cases it is indeed impossible by *raclage* alone to obtain a complete ablation of the lupus material, and we see almost at once a return of the lesions. *Raclage* is a good method for lupus of the trunk or extremities but not for lupus of the face. It all comes back to what I have so often said in my preceding letters: There is not one treatment for lupus, there are many therapeutic methods which one should know how to apply according to the particular case.

The Proper Course to Pursue when a Woman with Syphilis comes to Consult you.—Professor Fournier has just given in one of his remarkable lessons the line of action to follow when consulted by a syphilitic woman. This varies with the social status of the patient. If *irrégulière*, that is to say a woman who is kept or a prostitute she must be told at once the nature of her ailment so as to put her on her guard against the dangers of infecting others if she persists in maintaining relations with them. If on the contrary it is a married woman the line of conduct is much more delicate. To declare rudely that she is affected with syphilis is to risk, if the husband is the culpable one, causing domestic trouble, and separation in the family. If one simply gives a prescription without saying anything, this usually amounts to nothing for she does not fail to instruct herself upon the real nature of the drugs employed and thus learns the truth. Theoretically it is better to place the burden on the husband of keeping from the wife so far as is possible the nature of the disease which she has received from him. The husband must thus be taken into the case and entrusted with the direction of the care to be taken and the carrying out of the treatment. For this reason Professor Fournier does not advise giving the patient at the first visit a prescription which could awaken suspicion. A local treatment without mercury should suffice, the patient must be told that there are certain points in the case which do not appear quite clear, and for which reason a conversation with the husband will be necessary, or that there are certain things you wish to recommend to the husband, and ask to have him sent to see you. If the woman is innocent, that is to say if she has had relations with her husband alone, she will readily comply with your request. From this time on you have only to come to an understanding with the husband keeping as much as possible from the knowledge of the wife the real nature of her complaint. However too much secrecy can not be expected, for after a certain period of this prolonged and mysterious medication the woman begins to suspect the truth, but the object has already been attained, scenes of violence have been avoided which in the commencement would have been precipitated by a sudden discovery of the true nature of the disease and usually regrettable separations and divorces are avoided. But to act as we have suggested we must be quite sure of our premises. We must be assured that it is from the husband alone and not from some other that the contagion has come for in the opposite case it would be the same as saying to the husband "your wife has syphilis and as you haven't it, she must have contracted it from some one else." So as not to commit such a blunder care must be taken in speaking to the husband before having the full assent of the wife. If she is innocent she will have no reason to oppose the conference, if she is guilty,

that is to say if she has had relations with other persons she will without doubt take you at once into her confidence.

Investigation of the Pretended Tabetogenic Action of Mercurial Treatment.—Professor Fournier has been much exercised over the recent accusations which have been formulated against mercury as a possible cause of tabes in syphilitic subjects. It has been said that this drug is, perhaps, not innocent of the greater frequency of this affection in syphilitic subjects, and that as mercury is a vascular poison, it must exercise an injurious action on the vessels of the nervous system, which are so abundant and so delicate. In fact, the author has just observed two recent cases, in which he has seen two syphilitic subjects develop tabes in spite of a regular, rational and long-continued antisyphilitic course. In order to reach a solution of this important question, he has taken up, one by one, the numerous observations which he has been accumulating for a long time on the subject of tabes and syphilis, and has found 321 instances of the affection in question. Out of these 321 patients having undoubted syphilis and all affected with tabes not less authenticated, he has found : 1. Sixteen cases where no treatment had been instituted for the syphilis before the development of tabes. 2. Eight cases in which syphilis was only treated by the iodide of potassium. 3. Seventy patients who had undergone only an insignificant mercurial treatment lasting from a few days to two months; one hundred and eight who had been treated from three to six months; fifty-one who had been treated from seven months to a year; twenty-three one year; twenty-one to two years; twelve two years; five two to three years; six about three years, and two four years. Now if mercury is a drug capable of producing tabes, logically the number of tabes patients should increase with the increased length of mercurialization, but the preceding statistics show exactly the opposite. It results then that in a certain number of cases (24 out of 321) the subjects who have been attacked with tabes never took mercury, and in the second place the number of syphilitic subjects who develop tabes follow a descending progression, keeping pace with the length of the mercurial medication, which takes the character of a medication capable of therapeutic effects. Indeed, the number of tabetics which milder specific treatment of very short and clearly ineffectual treatment increases to 248, descends to 20 under treatment for a year, to 12 under treatment for two years, to 5 or 6 under treatment for two to three years, and to 2 under treatment for four years. It is thus scientifically impossible to attribute to mercury a tabetogenic action. And, nevertheless, in spite of specific treatment both rational and prolonged, one sees occasionally syphilitics develop tabes. Professor Fournier asks what is the cause of this, but is unable to give a satisfactory answer. He believes, however, that it is, perhaps, because in presence of a subject with syphilis, the physician is simply preoccupied with the disease itself, and not with the personal or hereditary morbid antecedents of the patient, antecedents which create in the economy a *locus minoris resistentiæ*, upon which the action of the syphilis is going more specially to take effect. It is certain that syphilis is in particular directed toward the nervous system by two order of causes, 1st, the nervous overwork (intellectual, moral or physical), 2d, nervous heredity. It is thus necessary when we have a syphilitic to treat who is thus predisposed, to attempt to relieve him as much as possible from the very beginning of the

infection, from all causes capable of creating in his case morbid excitation of the nervous system, such as produced by excesses of all kinds and especially venereal excesses, intellectual work exacting great tension of the mind, alcoholic excesses, excesses of table, fatigues, loss of sleep, worldly cares, emotions caused by gambling and speculation, and even too violent bodily exercise, on account of the congestive troubles which immoderate fatigue can determine toward the brain or spinal cord. Perhaps from a therapeutic point of view the bromides are indicated. At any rate hydrotherapy has its place naturally marked out in the treatment of this order of cases as a tonic agent, and a regulator of nervous function. The author believes that to arrest nervous trouble which threaten in tertiary syphilis, especially in subjects who are predisposed either by heredity or by acquired tendency, we must along with specific treatment insist upon special antineurotic treatment, either by hygiene and hydrotherapy, or, perhaps, by some appropriate remedies which may be called for to play the principal rôle. L. BROCC.

PARIS, January 3, 1892.

THE HISTOLOGY OF MOLLUSCUM CONTAGIOSUM.

To the Editor of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES:

DEAR SIR:—I have been much interested in the histological study of this affection as given by Dr. Macallum, of Toronto, in your last issue. I find his main propositions to be as follows:

1. The seat of the disease is in the cells of the stratum malpighii, and not of the sebaceous glands.

2. The so-called molluscum bodies are not independent animal organisms, *i. e.*, "psorosperms" or coccidia.

3. They are degenerated epithelial cells.

4. The degeneration is of a corneous nature.

Regarding these propositions I desire to call attention to the fact that Nos. 1 and 3 were declared and maintained in my "*Elementary Treatise on Diseases of the Skin*," published in 1876. When a few years later the position of molluscum contagiosum was under consideration by the American Dermatological Association in connection with the official classification of that body, both Dr. Geo. H. Fox and the writer supported the pathological views here stated, based on our personal microscopical studies. Our colleagues, however, from Boston, Philadelphia and Baltimore, supported the view that the affection originated in the sebaceous glands, basing their opinions on observations made by European dermatologists. In consequence of this molluscum contagiosum appeared for many years in their classification as an affection of the sebaceous glands. The evidence in support of proposition No. 2 was detailed by me in your columns about a year ago.

At that time I offered positive chemical and optical evidence in favor of the change being of a keratinous nature, and therefore not an amyloid degeneration as claimed by some. Dr. Macallum strengthens this view by detailing the negative results obtained on the application of the usual tests for amyloid matter. There still remains much to be learned concerning this curious affection; and it is to be hoped that the near future will reveal the causes of the changes which are so plainly visible under the microscope.

I remain, yours very truly,

HENRY G. PIFFARD.

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Original Communications.

A CONTRIBUTION TO THE SUBJECT OF CYSTIC TUBERCULOSIS¹

BY

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IN continuation of a case² which I presented at the meeting of the American Association of Andrology and Syphilology, in June, 1890, and with the object of asking your consideration of certain points, I beg leave to make the following report :

The patient returned to my care at St. Luke's Hospital in November last, in about the same condition locally as when he left, but somewhat improved in general by his country life. He was transferred to the medical side for treatment with injections of Koch's lymph, which was faithfully done under the care of my colleague, Dr. Kinnicutt. He gave decided reactions, but did not improve locally or generally. On the contrary, his general condition was poorer when he was re-transferred to me on March 10th. At this time he complains (as of old) of a constant burning pain about the perineum, shooting to the head of the penis; also of painful spasmodic contractions of the bladder, which expressed the urine violently. He is obliged to drain his bladder with a catheter through the supra-

¹ Read at the meeting of the Genito-Urinary Section of the N. Y. Academy of Medicine, October, 1891.

² Journal of Cutaneous and Genito-Urinary Diseases, July, 1890.

pubic sinus constantly, any accumulation of urine causing spasms. This catheter he has learned to fasten immovably in position by an ingenious arrangement of adhesive plaster, for the least movement of the end in the bladder causes pain, and immediately a spasm ensues. These spasms are also brought on by movements of any violence and during the passage of feces. His general condition is only fair. He is obliged to remain in bed; he takes and digests liquid food well, and is fairly nourished. His temperature is normal in the morning, with afternoon elevations to 100 or 101. He has almost sleepless nights, in spite of all modern hypnotics, on account of the frequent micturition. His urine is alkaline and cloudy. S. G. 1018. Albumin 25 per cent. Pus 25 per cent. and much mucus.

Attempts were made to irrigate his bladder systematically with solutions of boro-salicylic acid, permanganate of potash (1-1000), peroxide of hydrogen (1-20), etc., but they could not be carried out, owing to the extreme pain which they caused and increase of the spasms, which were bad enough before.

The unhappy man wished something done for his relief, and as at this time we were still theorizing in regard to the Koch treatment, it seemed reasonable to suppose that there might now be softened, necrotic tubercular tissue in the bladder and prostate, which, if removed by surgical measures, would give him the desired relief. Accordingly, I determined to reopen the bladder, inspect its walls thoroughly, and be governed as to further procedure by their condition. This was done on April 25th. A director was introduced into the suprapubic sinus and the opening extended upward and downward in the line of the old cicatrix. A finger was then inserted for the purpose of exploration, and it was appreciated that the bladder was contracted so as scarcely to be able to admit the finger; that its cavity would not probably hold half an ounce, and that its wall was soft and pulpy. At the upper angle of the new wound in the bladder, where the latter was joined to the abdominal wall by the old cicatrix, the exploring finger distinctly felt the bladder-wall give way and tear backward and downward in a dull, flabby way, like the tearing of wet blotting-paper. As the finger was withdrawn, a small portion of the omentum followed it. This was replaced and kept back by iodoform gauze packing. The utmost gentleness had been used, and this was a pathological condition entirely unexpected. Under these circumstances, it was found impossible to introduce retracting instruments without danger of further opening the peritoneum, and hence a view of the interior of the bladder was not obtained. A curved sound was passed through the wound into the urethra, its beak made prominent in the perineum, and an urethrotomy done. The rigid neck of the bladder was then divided, and the base of the viscus and the prostatic urethra were thoroughly curetted

with a long, sharp curette, till it seemed that the entire thickness of the mucous membrane had been removed. Thorough irrigation with boro salicylic solution followed. A continuous rubber tube was passed through the suprapubic opening and out of the perineal wound below, fenestræ being made in that portion occupying the bladder. Iodoform gauze was packed around the tube and light dressings placed over the wounds.

For the next four days he was wretched in the extreme, with many exceedingly painful spasms and with constant hiccough which nothing would control. For the first twenty-four hours the bladder did not drain well, the tube requiring frequent flushings to remove blood clots. After that the drainage was good. His pulse varied from 124 to 160 and his temperature ranged between 101 and 102. He took small quantities of liquid diet and required hypodermatic injections of Magendie's solution of morphia for the severe pain and insomnia. On the fourth day the packing holding up the omentum was removed, and on the fifth day the presence of the tube appearing to be very distressing it was also removed. The pain in the bladder was immediately relieved and five days later (the 10th day) was almost gone, his greatest annoyance being the hiccough which also ceased spontaneously (having been modified only by morphia) on the eleventh day.

May 13th (seventeen days after the operation) it is recorded "during the last week he has improved in every way; temperature is now almost normal, rising to between 99 and 100 of an afternoon; no prostatic or vesical spasms: no pain in bladder. In fact he is now more comfortable than he has been for a year. His bladder is irrigated daily with a solution of salt (3 i.—Oj.) the nozzle of irrigator being simply inserted in the mouth of perineal wound." The urine was allowed to drain into the dressings from both wounds and he remained perfectly comfortable, gaining in every way till May 24th, when he again began to complain of vesical spasms (the pain being very severe night and day) and of an afternoon rise of temperature to 102. As the irrigations, no matter how gently or skilfully done, seemed to aggravate his bladder symptoms, they were stopped. By May 30th the suprapubic opening has narrowed in spite of measures to maintain its patency, and considerable urine is passed by the penis which causes the old spasms. On June 3d this opening has entirely closed but the perineal sinus remains through which a little urine escapes, the majority being passed by the penis with the usual spasms. It may be remarked here that all steps taken for the purpose of keeping open the sinuses intensified his sufferings and it was found that he was more comfortable by being let alone. During the next two weeks he gained in general health, having no constant pain but spasmodic on passing water which he is compelled to do about

every five minutes. His temperature still rises of an afternoon to between 101 and 102.

On June 18th the left epididymis suddenly became painful, tender and swollen without any instrumentation or other external cause. It was relieved in five days by rest and boracic acid compresses (?) but the swelling persisted, and a few days later, suppuration having evidently taken place, an incision was made, and thick, foul smelling pus evacuated. In the discharge from this abscess numerous tubercle bacilli were repeatedly found, then for the first time confirming a diagnosis which, however, the clinical course of the case had left no reason to doubt. This man's urine had been repeatedly searched by more than one competent person, not only during the time that he had been under my observation but during the course of the Koch treatment, without detection of the bacilli.

On the 18th of July the patient was sent to his home in Vermont, the following record being made. "There is no improvement in the patient's general status. He has lost weight; appetite poor; temperature ranges with great irregularity between normal and 103; pulse is becoming characteristically more rapid; spasmodic vesical pains more frequent than formerly; he scarcely ever sleeps without an anodyne and then is awakened frequently from the necessity of urinating."

The progress of this case seems to confirm the inference which I drew in my last report, that the disease was primarily local in the prostatic urethra and gradually extended thence to other organs. Thus, up to the present time there have been no evidences of pulmonary foci, but within the past two or three months he has begun to complain of pain in the region of the left kidney; and the left epididymis, which had inflamed in January, 1890, resolving without leaving any deposit, had in this last attack unmistakable evidence of tubercular suppuration.

In commenting upon it, one of the first things that strikes us is the apparent uselessness of all the measures taken for his relief. The Koch treatment was utterly futile. It made not the slightest impression upon his symptoms, nor when the bladder was opened was I able to appreciate any of the so-called softened areas. But the curetting was done in a general way, aided by the sense of touch, with the idea of removing, as far as possible, all diseased mucous membrane. On the other hand, it is true that for a few months a suprapubic drainage did him some good; that is to say, in the mitigation of his pain, which, however, persisted, as did also the involuntary, painful, forcible expression of the urine by the bladder which he very rightly called "spasms."

When he returned to my care in November last these were already increasing in intensity and the interior of the bladder had become so sensitive that the least movement of the soft rubber tube caused him great suffering. It will be observed, however, that for a month after the last attempt at drainage he was positively free from pain for the first time in about two years, and it seemed therefore that as long as the function of the bladder could be abrogated relief would be obtained. I am aware that for this purpose, it has been suggested to divert the ureters to a suprapubic opening, but I have been unable to find any case on record and can therefore draw no conclusion from experience and will be glad to learn from my colleagues upon this point. It seems to me that this fact alone, i. e., that relief was obtained for the first few months, and again for one month, should give us hope of being able to do something for these unfortunates who certainly ought not to be abandoned because we cannot hope to remove *all* tubercular foci, the extent of which we cannot of course fully appreciate.

We know from the records of autopsies that tubercular foci do cease developing and that the tissues heal, not only in the lungs but in other regions, and the question which we will have to consider will be whether to resort to active surgical measures with the idea of helping nature to rid herself of, or, to surround the infectious materials; or, to leave the patient to hygiene alone.

In an interesting article by Guyon upon Tubercular Sarcocoele,¹ he takes the position that all tubercular disease, whether in the lungs or elsewhere, is primarily a local disease and develops from local foci, but that usually when these patients seek advice the associated organs have already become infected.

If then a primary deposit in the bladder can be recognized early enough, why not undertake some measure to aid in its healing without waiting for further infection? Rest or cessation in the function of an organ certainly aids in the healing process. Whether this should be undertaken or the patient left to the remedial influence of good hygiene is a question I think can best be determined by the individual characteristics of each case. I fear that the weak point in my case is that the right kind of drainage was not instituted early enough.

About a year and a half ago I saw in consultation a case

¹ *Annales des Maladies des Organes Génito-Urinaires*, July, 1891.

with long continued characteristic symptoms, which were certainly very suspicious of cystic tuberculosis. Contrary to my advice at that time, simple perineal drainage was instituted with perfect relief to his symptoms. Within the past six months a tubercular testicle was removed from this gentleman, but he has had at no time any return of the vesical symptoms.

At present I have under observation a case analogous to the one which is the subject of this report, but in which the diagnosis had already been made by the removal of a testicle in which tubercle bacilli had been found. The only lesion in the bladder that I could discover by the cystoscope prior to the operation and confirmed during the latter by ocular inspection was an intense hyperemia of the mucous membrane at the base of the organ. This man was relieved immediately from his pain and tenesmus by the double drainage; that is to say, by the suprapubic and perineal openings combined, and when the latter was allowed to heal the benefit continued. At present he is wearing a permanent suprapubic tube draining into a rubber urinal fastened to his thigh and is living in the country with the hope that as his general condition improves he may yet be able to leave off this bladder drainage. He has already derived more benefit than at any time was achieved for the subject of this paper.

In another case recently submitted to me by a colleague for a cystoscopic examination no ulceration was visible, but the characteristic hyperemia, localized in areas in the prostate and at the base of the bladder together with the subjective symptoms extending over a long period of time, made the diagnosis of tubercular disease tolerably certain. No tubercle bacilli had been found in his urine, but albumin, a trace, was present. I advised curetting and prolonged drainage. To this my colleague, a distinguished general surgeon, objected and preferred the hygienic treatment only. Hence it is evident that even if an early diagnosis be made in a given case there might be naturally a great difference in judgment as to the course to be pursued.

31 East Forty-fourth Street.

Chloral in the Treatment of Furuncles.—A tampon saturated with the following mixture is said to be useful in the treatment of this affection :

R Chloral, 10 grams.

Aque.

Glycerine, 55, 20 grams.

REMARKS ON CARBUNCLE WITH REPORT OF A PECULIAR CASE.¹

BY

DR. HERMANN G. KLOTZ, NEW YORK.

THE following case was observed several years ago, and at that time attracted my attention, particularly on account of the difficulties of the diagnosis. I have kept the notes in my desk waiting for the occurrence of similar cases, but although no such opportunity has offered itself, I believe the observation is of sufficient interest to be made the subject of a few remarks.

Franz Ch., 57 years of age, a native of Bohemia, and a baker by trade, was admitted to the ward for Skin and Venereal Diseases of the German Hospital on July 21, 1882, for an extended ulcer on the back of the head. The history of the patient showed the absence of any previous, particularly of venereal or skin disease. The present affection began about four weeks ago as a small hard lump, which gradually increased in size, until it reached its present dimensions. It did not cause much pain or inconvenience, so that the patient continued to work until a few days previous to his admission, when the bleeding and the copious discharge compelled him to apply for treatment. The patient was of small size, poorly developed and poorly nourished, of a pale, somewhat cachectic appearance. On admission he was slightly feverish, the temperature not exceeding 101.5°. The urine was normal, containing neither sugar nor albumen and remained so throughout. Aside from a large, reducible left inguinal hernia, no pathological conditions were found except on the right fore-arm and on the back of the head. Here almost the entire occipital region from one ear to the other was occupied by a dark red tumor about the size of a hand, sharply defined from and rising about one inch above the surface of the surrounding skin; on the affected portion the hair was entirely absent. Apparently without adhesion with the bone the tumor consisted of soft masses of fungous granulations of different shape. On the left side, near the ear, the surface was deeply ulcerated over a space somewhat larger than a silver dollar; from the fundus of the ulcer as well as from the decaying borders profuse parenchymatous bleeding took place. On the right side, where the tissue was more consistent and altogether better preserved, numerous round holes, from the size of a pin-head to that of a pea

¹ Read before the American Dermatological Association, Fifteenth Annual Meeting.

would be noticed, from which pus was oozing and could be squeezed out in larger quantities like from a sponge, by pressure on the tumor. The surrounding skin was of normal color, somewhat movable over the underlying bone, entirely free from infiltration. On close observation, however, it was found that numerous hairs were surrounded at their base by small pustules. The hairs could not easily be removed; on epilation the superficial nature of the pustules became apparent. No other abnormalities could be found on the scalp. The cervical, post-aural and submaxillar lymphatic glands did not show the slightest enlargement or sensitiveness. The secretion from the fungoid mass was copious and of very offensive nature, resembling the odor of cancerous ulcers. Pressure or touching of the tumor was not painful.

On the right fore-arm several disseminated, sharply defined, round or bean-shaped, dark red patches were observed, partly covered with thin crusts. After removal of the latter a number of round, sharp-edged holes presented themselves to view, from which small plugs of pus could be removed. These patches showed a certain resemblance to those portions of the occipital growth, where the process of destruction had not yet made much progress.

The profuse bleeding was stopped by application of perchloride of iron; the rest of the tumor was thickly dusted with iodoform, but as the unbearable stench continued, applications of diluted aqua chlori were resorted to.

As to the diagnosis of the case, I must confess that I was at a loss. The patient was not very intelligent and little information could be obtained from him. His statements certainly did not suggest the history of an acute inflammatory disease like carbuncle: the pain had been but very slight and he had not been prevented from working. Nor were there any local or general symptoms of such an affection present on admission, no congestion, nor intumescence of the surrounding parts. Had the tumor been situated somewhat lower down on the neck, the frequent occurrence of carbuncle in that region would have pointed more directly to that affection. Besides I had never before seen such a complete destruction of the skin and such exuberant fungoid granulations in a carbuncle.

The patient had been sent to the hospital from the surgical department of the German Dispensary; here some malignant tumor had been suspected. The whole appearance and particularly the offensive character of the discharge offered good reasons for that opinion, the rapid development, however, and the absence of any affection of the lymphatic glands were against it.

The tumors occurring, according to the descriptions of several authors, in the later stages of mycosis fungoides may present such fungoid granulating masses rapidly breaking down, but the absence of any other symptom of that rare disease, and the history of the case itself, furnished sufficient proof against the diagnosis of mycosis fungoides.

Kerion Celsi next suggested itself, which indeed may present painless and hardly sensitive growths of similar appearance. Careful research, however, failed to prove the existence of spores or mycelia of trichophyton either in the secretion or in the tumor itself or in the adjoining parts.

While watching the case and looking for an explanation, a report in Virchow's *Jahresbericht* of a paper by Collins Warren, of Boston, fell into my hands and seemed to furnish a solution of the question. Indeed, on looking up the original¹ paper, I found sufficient enlightenment of my case. Subsequent observation even more distinctly revealed the fact that, as described by Warren, suppuration and necrosis had begun in the subcutaneous tissue, probably at first in a circumscribed locality, but gradually spreading to the periphery. The suppuration had reached the surface by means of the columnæ adiposæ, which, in their turn, becoming necrotic, after the destruction of the cutis itself and the development of the exuberant fungous granulations, had caused the formation of the numerous pus ducts and cavities. Utterly neglected, the newly formed, short-lived granulations had become ulcerated. There was no longer a doubt that I had to do with a carbuncle or, rather, a diffuse carbunculous inflammation.

To complete the history of the case, under the application of the diluted aqua chloric and iodoform the disease made no further progress. The ulceration near the left ear did not increase, necrotic tissue began to be eliminated spontaneously or was removed with scissors, bleeding became less frequent and less profuse, and gradually more healthy granulations began to crop up. On the right side the intumescence of the fungous masses subsided, suppuration diminished and firm granulation tissue developed. With the subsidence of the swelling the necrotic subcutaneous tissue came more and more into view. Necrosis was found to extend under the apparently healthy skin to the periphery, and large pieces of tissue had to be removed with pincers and scissors. The disseminated patches on the fore-arm, which conformed equally well to Warren's de-

¹ Boston Medical and Surgical Journal, 104, No. 1, 1881.

scription, healed quickly under similar treatment. The general condition of the patient was satisfactory, the temperature occasionally rising to 101 in the evening. On the 29th of July the patient complained of headache, tired feeling, want of appetite, and the temperature rose to 102.3. Iodoform intoxication being suspected, this drug was omitted, and the symptoms promptly disappeared.

By August 6th the entire surface was in the condition of healthy granulation, and everywhere the epidermis began to sprout from the borders. Without any apparent cause, on the previous evening there was observed a moderate swelling of the right epididymis. On August 13th the granulating wound had become somewhat smaller; the secretion, however, continued to be very copious. On August 10th the open surface still measured twelve centimeters between the ear and between five and seven centimeters in height, and on August 17th ten centimeters in width and five centimeters in height. From that date on the wound made favorable progress without any interruption, mostly under dressing of borated vaseline, and on September 17th was perfectly covered with smooth, soft epidermis.

The epididymitis made slow progress. After a few days a hard irregular tumor about the size of a walnut could be felt. Gradually the scrotum became adherent, and on August 24th the lower portion of the swelling distinctly showed fluctuation. On the following day an incision evacuated a considerable quantity of pus. The abscess cavity, which did not seem to communicate with the epididymis or with the testicle itself, was scraped out with the sharp spoon. The abscess healed kindly under antiseptic dressing, and was entirely closed on September 10th.

The case apparently presents several unusual features. The occurrence of carbuncles of so large a size is in itself quite rare, except perhaps in individuals affected with diabetes. It has been stated that in my case sugar could not be detected in the urine at any time.

In a carbuncle of so large a size, and, besides, in a locality where the connection between the bone and the cutis is particularly tense and firm, we certainly could expect to find very severe subjective symptoms, pain and sensitiveness, even after due consideration of the indolent and somewhat apathetic temperament of the patient. The signs of a more acute inflammation might be wanting in a marantic individual, but although

poorly developed and poorly nourished, the patient was certainly not in a cachectic state when admitted. It is hardly doubtful, under the circumstances, that the carbuncle had developed from the start in a more or less subacute manner, contrary to the description given in most handbooks.

The same can be said of the more diffuse arrangement of the carbunculous process, which evidently had taken place in my patient. Many authors, principally German dermatologists, who apparently have taken little notice of Warren's researches, describe the carbuncle as always circumscribed, while Warren's description of the pathological conditions of carbuncle plainly shows why the carbuncle may become, and in reality often becomes, diffuse and spreads in the periphery. In the present case I have no doubt that the necrosis of the subcutaneous tissue was circumscribed at first, but gradually spread, and probably would have extended still farther if it had not been stopped by therapeutic measures.

Subsequently to this observation, I have met on several occasions with more or less diffuse alterations of the skin on the front aspect of the thigh, which closely resembled the small patches on the fore-arm mentioned above. Although they hardly caused any pain, and but slightly exhibited the signs of an acute inflammatory disease, the necrosis of the subcutaneous tissue and the ascending suppuration through the characteristic holes in the skin, as described by Warren, could distinctly be observed. Therefore, I believe that such affections should be designated as *diffuse carbunculous dermatitis*. In one of these cases the cause of the affection could be made out with great probability. The patient had previously been under my treatment for syphilis, and considered the eruption as due to this disease. He was employed in a sugar refinery, and during work his clothing became more or less saturated with a fine spray of a solution of sugar, particularly in front of the body. The affection healed very rapidly under indifferent treatment as soon as the patient ceased to work, but reappeared after he had resumed and continued work for some time. It therefore seemed quite probable that it was caused by the effects of the sugar, perhaps combined with the heat of the spray, which on the front aspect of the thigh could easily penetrate the tight-fitting clothing and irritate the skin. Unfortunately, I lost sight of the patient, and could not follow up the investigation of this question.

BASSORIN PASTE IN THE TREATMENT OF SKIN DISEASES.

BY

GEORGE T. ELLIOT, M.D.

Attending Dermatologist Demilt Dispensary, and New York Infant Asylum; Assistant Visiting Physician, New York Skin and Cancer Hospital; Lecturer on Dermatology, New York Post-Graduate Medical School, etc.

ABOUT a year ago, I first called attention to the substance, bassorin, obtained from gum tragacanth as a base for the preparation of a paste or varnish to be used in the treatment of certain diseases of the skin, and I recommended its use for the reason that it possessed properties, which in my opinion rendered it superior to greasy applications, to collodion, etc. Similarly to those other menstrua, with bassorin paste almost any drug could be incorporated, and then each exerted the same effects as it did when used in an ointment, etc., but the superiority of the varnish was shown by the cleanliness attached to its use, by the fact, that when rubbed upon the surface it dried rapidly, forming a coating and thus keeping the remedy continually in contact with the skin. When desired, it could be removed with the greatest of ease, by means of a little water, or a wet sponge, etc. In the preparation of the paste, Mr. Lascar used the pure bassorin incorporated with the other ingredients in the following proportion:

R	Bassorin	48
	Dextrin	25
	Glycerin	10
	Water	q.s. ut ft. 100.
	M.	

The resulting paste was a smooth jelly-like compound resembling somewhat vaseline in color. It was odorless and in every other way absolutely unobjectionable, requiring in its use only the care of keeping it in a well-closed glass jar.

Recently, Dr. Unna in treating of various varnishes for the skin referred to my bassorin paste, speaking very favorably of it and stating that it possessed decided advantages over the pastes previously made with gum tragacanth and also such as has been more lately recommended by Dr. Pick of Prague. The latter, it is true, says that he found bassorin to be the most suitable substance for the making of such varnishes; but as his formula calls for *gum tragacanth* and his paste is not made with the bassorin alone, but also contains all the other

constituents of the gum, it is evident that Pick's varnish differs materially from the bassorin paste recommended by me. Following Mr. Beiersdorf's advice, Dr. Unna obtained his bassorin from salep, the prepared bulb of the orchis mascula, instead of from tragacanth, for the reason that from it the former could be made cheaper and simpler. Mr. Lascar informs me that his first experiments were also made with salep, but he discarded it, because from it he could not obtain bassorin in a pure state, but only mixed with starch, and so he chose tragacanth in preference. The objection to the starch was that its presence caused the paste to become sour very rapidly, a fact of importance, as it is not always convenient to have the bassorin made freshly every time it might be needed. Tragacanth was, therefore, preferred, and that the paste made from the pure bassorin retains its freshness for an indefinite period of time, I have had ample opportunity of observing, still making use of samples of it, which were put up for me in November, 1890, and which are as good and as fresh as at first. Unna states also, that in the bassorin paste made from salep the addition of dextrin was unnecessary. I do not doubt but that the admixture of starch referred to above in salep-bassorin obviated the use of dextrin, but I can assure him that the tragacanth-bassorin paste was tried for some time by me before dextrin was added, and it would never form an adherent coating, but always rubbed off as easily as an ointment would.

The use of the bassorin paste for now more than a year has enabled me to judge of its value in cutaneous disease, and to recognize more correctly the particular forms of trouble for which it is useful, and to estimate the results that can be expected from it. Similarly to all other varnishes or preparations, it can certainly not lay claim to universal applicability, nor can it be said that it is of the same value or productive of the same beneficial effect in every case of cutaneous disease. On the contrary, it has proved useless in some instances, inapplicable in others, and practically without any action whatever in still others; but notwithstanding these failures, I have seen as yet no reason to alter the opinions I expressed in regard to the bassorin paste in my first paper, though my experience has modified them in certain particulars and has caused me to narrow somewhat the scope of its applicability. During the heat of summer bassorin paste proved to be of limited use. It did not dry completely, but remaining sticky, it produced a certain amount of discomfort. This was due to the perspiration, which,

continually furnished by the skin, would mix with the paste and keep it soft, in the same way as though water was added to it. In consequence, application of the paste had to be discontinued wherever two surfaces came in contact, as in the axilla, anal furrow, inguinal regions, between the fingers. On the free surfaces, however, chest, back, extremities, face, etc., the same measure of objection did not exist, and in the majority of persons, especially those who did not perspire freely, the bassorin could be applied. If there was slight stickiness, it could be materially obviated by the addition to the base of zinc oxide, or amylum, or orris, etc., to the amount of 5 to 10 per cent. As soon as cool weather returned, the objection referred to entirely disappeared and most extensive use of the paste could be made. It is, however, in private practice that it proved especially serviceable, while in public practice the carelessness, stupidity, etc., of the patients rendered its use fraught with difficulty, and so it was only occasionally called into service. In private practice, it was, moreover, very grateful to patients, owing to its cleanliness and the absence of greasiness and stickiness, and the effects obtained from it in suitable cases were all that could be desired.

In psoriasis the bassorin did not give the results hoped for and expected. With it, chrysarobin (10 to 15 per cent.), or pyrogallie acid (5 to 10 per cent.), or ol. rusci (℥i. to ℥iss. in ℥i.) were combined. In several instances, one or the other of these were applied to the patches and lesions after they had been thoroughly washed and the scales removed, but the effect produced was either very slight or none at all; the production of scales was not prevented and involution of the lesions did not ensue. In those cases in which an effect was observed, it was in no particular commensurate with that obtained from the same remedies incorporated in some other menstruum. On the other hand, a 10 per cent. gallacetophenone-bassorin paste gave in one case of psoriasis very quick and good results, and its continued use caused so much itching and irritation that it had to be weakened to 5 and finally to 3 per cent. Why the chrysarobin and other remedies, when incorporated in the paste, did not produce the same effects as when collodium or gelatine was the menstruum, I cannot say, but that they did not was so apparent that its use in the treatment of psoriasis has been practically given up by me. In certain forms of acne, the paste proved to be of great value. Particularly was this observed in those cases which presented acutely inflamed papulo-

pustules and pustules as the predominant lesions. In these, a varnish containing R zinc oxide, grs. 20, magnesiae carbonat. grs. 15, acid. borici, grs. 30, bassorin paste, $\tilde{\text{z}}$ i. M., was applied over the entire face at night and washed off in the morning. Its effect was seen in the speedy subsidence of the acute symptoms and the disappearance of the majority of the lesions. A change could then be made, and to the paste 3 to 6 per cent. ichthyol, or 6 to 10 per cent. sulphur, or if there was much fatty secretion 5 per cent. sulphur and 3 per cent. resorcin were added, and then it was used in the same manner as above mentioned. During the daytime nothing was applied to the face, or after a week or two and the acute symptoms had disappeared, a 2 per cent. resorcin lotion or a 6 to 10 per cent. boric acid lotion was applied. When the acne was of the indurate type, the ichthyol paste (5 to 10 per cent.) was applied from the beginning, or to this 2 to 3 per cent. resorcin was added. When seborrhœa oleosa was a marked complication, the resorcin and sulphur paste was more serviceable, but at other times the ichthyol alone, or the ichthyol and resorcin.

There is another form of eruption not uncommonly seen and which being situated especially on the face and consisting of papular elevations, is usually considered to be a form of acne, a papular acne. In such cases, the outbreak is acute in character and the lesions, few or many in number, are of a bright erythematous red and are accompanied by a decided sensation of itching and burning. At times, in addition to the papules, there are urticarial-like patches seen, or a large portion of one or both cheeks is of a bright erythematous red and over this surface a considerable number of the papular elevations already referred to are observed, causing the skin to have an uneven appearance. These symptoms, not always limited to the face, but also extending upon the neck and over the shoulders, are often transitory in character, remaining present only a few hours, though in some cases repeating themselves several times daily; they likewise may remain in existence for several days, gradually fading and disappearing without leaving a trace. Occasionally, a few have suppurated, but when opened did not appear to be connected with the sebaceous glands, nor was any admixture of sebaceous matter found in their contents. These cases have for a long time represented to me an erythema vasomotor in nature, and depending for their origin either upon a local irritability of the vasomotor nerves or upon some cause acting in a reflex manner. The eruption has been met by me

entirely in women and has constituted a most distressing affection, for though it appeared in some cases suddenly and only with a menstrual period or during the flow, yet in others, it would develop after every meal, or from exposure to the wind, or whenever the face was washed, or under the influence of the slightest excitement, going to the theatre, or to a reception, etc., or from any slight local irritation, as wearing a veil or rubbing the skin, etc. The phenomena mentioned occurred especially in those women of nervous temperament, excitable and slightly hysterical. I would instance a patient, who for years has had appear on the cheeks a number of these papular lesions after drinking a glass of wine, after any mental emotion or nervous strain of any kind. They would represent lesions of various sizes, itch and burn, and remaining for some hours disappear without leaving a trace. In some particulars, the process resembles much the initiatory stages of a rosacea, but in none of the instances which have come under my notice, some of which had already lasted one or two and three years, had there been any further development such as occurs in that affection, but there had been only the continued repetition of the same lesions, which in their turn ran the same course as at first and neither permanent redness nor angiectasia had resulted. In consequence, I would regard the process as distinct from rosacea, though being a vasomotor neurosis, and, as already mentioned, would regard it as an erythema neurotic in nature. In the treatment of these cases, of course whatever cause appears to act as the reflex source of the process should receive appropriate treatment, but in my experience this alone is not sufficient to quiet the vasomotor irritability of the skin. Nor in those cases depending entirely upon local causes does internal medication appear to have any effect. In these patients, ichthyol in bassorin paste has given brilliant results, when lotions, unguenta, etc., with or without ichthyol have failed, and its effect has been shown especially in those cases not the outcome of reflex action, but purely local in nature. Under its use, there would be a cessation of the skin's reaction to those one or another causes, which primarily and repeatedly induced an outbreak. The patients would be able to wash their faces, to go out in all kinds of weather, and to expose themselves with impunity to any of those causes, which previously would have provoked the eruption without fail.

In rosacea of various origin the bassorin was also very serviceable as the basis of the local treatment. An ichthyol or a sul-

phur-bassorin paste either alone at night or combined with a resorcin or boric acid lotion in the daytime and daily washing with soap and water gave as good results as any other form of local treatment I have used. In these cases, however, internal remedies, such as were indicated by the patient's functional and systemic health, were also given and unquestionably contributed to the good effects observed. When acne pustules complicated a rosacea, that is, when acne rosacea existed, the same local application was used with signal benefit, the lesions undergoing rapid involution, and no new ones developing under the continued use of the paste. In rosacea originating from seborrhoic eczema, the effect of the bassorin-resorcin, or bassorin-aristol or sulphur was particularly brilliant and rapid. As a rule, it was better than when the process was treated with ointments or lotions containing the same ingredients as the paste, and was more satisfactory, owing to the continued effect kept up by it upon the diseased surface.

In all the forms of seborrhoic eczema on non-hairy surfaces, the bassorin was not only particularly beneficial, but superior to any other menstruum. Its advantages were shown not only by its cleanliness, but also owing to the continuous contact on the diseased surface of the drugs incorporated with it, the process was removed with the greatest rapidity, the itching was quieted and the results were quicker than from any other means of treatment used. The same benefit was observed to be derived from it in all eczemas parasitic in origin, and in those others of various causations, which were superficial in seat. In chronic squamous or other eczemas, where some decided degree of thickening existed, the paste did not exert much influence or produce much effect, beyond quieting the itching. In neurotic eczema, as a protection and as a means of relief from the attendant pruritus, it was very useful, thus removing some of the sources of relapses and also giving material aid to the internal treatment directed towards correction of the reflex causes of the eruption. The bassorin paste alone or in combination with various antipruritic remedies proved very serviceable in many cases of pruritus, especially those more localized in extent. It gave great relief in pruritus hiemalis, in pruritus scroti et perinei, etc. During its application the patient would be free from the distressing itching, being able to sleep and feeling infinitely more comfortable.

In chilblains, ichthyol-bassorin (10 to 20 per cent.), acted excessively well in combination with vigorous rubbing and

massage. A patient, for instance, who had suffered intensely for several years every winter and who began to experience the same trouble with the return of the cold weather this season, has been able to go about without discomfort, and since beginning the application of the paste has experienced none of the distressing symptoms formerly complained of, though all previous forms of treatment had failed to relieve her. In the superficial parasitic diseases, especially pityriasis versicolor, the paste has likewise given as good results as could be desired when combined with quinia or red precipitate or some other parasiticide. In tinea circinata the effects have also been good.

I do not think it necessary to continue the enumeration of the various forms of cutaneous disease in which the bassorin paste has been used and proved valuable. Those already mentioned are sufficient to show that the scope of its application is an extended one and in conclusion, I would only repeat that its particular advantages are its cleanliness, ease of application and removal. Besides these, it takes up almost any remedy desired, keeps it in direct contact with the diseased surface, thus producing a continuous effect, and only rarely does it seem to interfere with the action of the remedy used. By its means the nastiness of greasy person and garments, so objectionable to patients, is obviated and beyond its value in other directions, in that feature alone it certainly is particularly to be praised.

7 West Thirty-first Street.

ASPIRATION FOR THE RELIEF OF VESICAL DISTENTION. IS IT ALWAYS PRACTICABLE ?¹

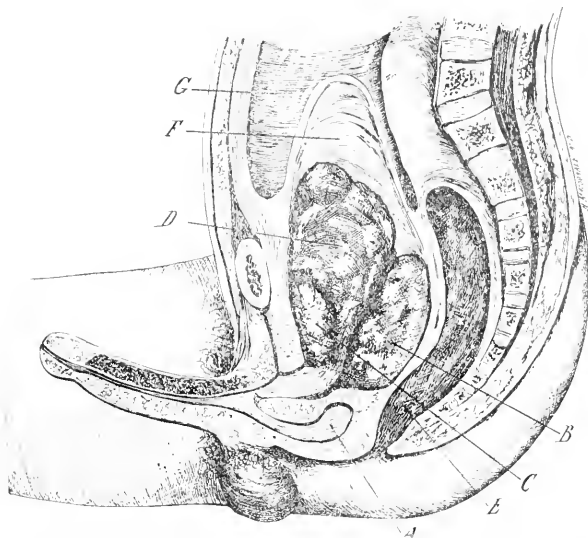
BY

EUGENE FULLER, M.D., NEW YORK.

IN a case of retention of urine a surgeon is apt to feel if he has an aspirator at hand that he can at least relieve suffering for the time being even though he can not enter the bladder through the urethra. In the case about to be reported, however, aspiration either above the pubic bone or *per rectum* was impossible, and it was thought that suprapubic cystotomy would have to be resorted to in an emergency when finally a

¹ Read before the Genito-Urinary Section of the New York Academy of Medicine, February 11, 1892.

very small instrument slipped by an extensive false passage and through the stricture thus affording relief. The two chief points to be emphasized in this case are, 1st the extensive lateral¹ prostatic hypertrophys which occupied the distended



a, False passage; *b*, Section through median prostatic hypertrophy; *c*, Section through upper encircling prostatic fibres; *d*, Lateral prostatic hypertrophy; *e*, Rectum; *f*, Bladder cavity; *g*, Peritoneal cavity.

vesical space for fully two inches above the pubic symphysis, and 2nd, the broad wedge-shaped area of the peritoneal cavity filled with intestine which extended, notwithstanding great vesical distention, to within about one and a half inches of the pubic bone thus overlapping the prostatic growth. The minor points are, 1st the stricture, 2nd the false passage in front of the stric-

¹ The fact that the prostatic hypertrophy extending above the pubes was lateral and not median, was demonstrated by the angle taken by the instrument which finally entered the bladder.

ture and 3d the median prostatic hypertrophy. [See cut on page 191.]

The case was first seen in this condition of emergency. The previous history is as follows: About ten years ago the patient who was then 55 years of age, was seized with a retention of urine due to prostatic obstruction and from that time his catheter life commenced. At first, as is common in such cases, a good sized soft rubber instrument went easily and he had little trouble. After a time, however, he caught cold causing some urethral spasm, and the soft instrument did not go well. A stiffer one with a stylet was obtained and pushed through rather roughly followed by bleeding. Thus an irritation was started which gradually increased and finally caused a stricture which encroached very much on the calibre of the deep urethra. A few years ago after one of these spasmodic attacks, the deep urethra then being considerably strictured, a false passage was made on its floor just in front of the triangular ligament. This false passage afterwards proved troublesome to the patient and at times his instrument would enter it. Then after a smart push blood appearing and the instrument refusing to go further, it was withdrawn and a fresh trial made with probably better success. In this manner the false passage gradually grew to be very deep and extensive dissecting its course down between the rectum and prostate. The patient became very skilful in passing this fine instrument so as to avoid this pitfall.

At last, however, his catheter got caught in the false passage, much bleeding and irritation was set up and the instrument would not pass. The patient now for the first time came under observation, suffering and straining greatly with acute retention. There was considerable urethral bleeding resulting from the patient's futile efforts with his catheter. Various kinds of instruments were now used in an attempt to reach the bladder, but they were all either arrested at the triangular ligament or else apparently about two and a half to three inches farther on. In this latter case if the finger were introduced into the rectum the end of the instrument could be felt just above the upper rectal wall behind the internal sphincter resting at the bottom of the pouch formed by the false passage. The general condition of the patient was bad, the statement being made that his urine was very foul and contained much albumin. Under these circumstances, especially as his family had not been notified, an immediate cutting operation was not felt to be desirable if any palliative means could avail. An opiate was administered and after the patient became a little more relaxed percussion above the pubes showed flatness for about an inch and a half; higher than that, however, tympanitic resonance commenced. At the upper border of this flat area an aspirating needle was inserted.

The needle pierced the yielding abdominal layers and the bladder wall easily, it then struck a hard dense mass and would go no further without considerable force. The angle of introduction of the needle was changed as much as possible in the attempt to get above the upper edge of this mass but everywhere the same growth was encountered and its edge could not be felt. The suction of the aspirator was now turned on and each time as the end of the needle was raised from the mass a few drops of foully smelling urine flowed into the aspirator and then the flow stopped. The soft upper wall of the bladder evidently being drawn into the eye of the instrument. In an ordinary case of distention the anterior bladder wall lies up against the abdominal wall, but in this case the tympanitic resonance demonstrated that it was impossible to aspirate higher up thus escaping the growth, for fear of perforating the bowel. The finger in the rectum disclosed an enormous smooth prostatic growth extending farther than the finger could reach.

Dr. Keyes now saw the case and it was decided to chloroform the patient and have everything prepared to make a snrnapubic opening in case no instrument could be made to enter the bladder while the parts were in a state of perfect relaxation. Happily, however, after considerable trial a very small English gum elastic instrument on a stylet entered, and about a quart of very foul urine was drawn off and the bladder washed. The instrument was tied in without being withdrawn for fear that nothing could again be made to enter. Now on deep pressure over the pubes the smooth walls of the enormously hypertrophied prostate could be felt and in a rough manner mapped out, the bladder being empty. The patient was comfortable after this but never rallied out of the uramic condition he was in when he came under observation, so operative measures for his relief were not warranted and death resulted at the end of a week.

To illustrate the points in this case a schematic drawing has been made of a vertical median section of this region of the body with the existing peculiarities.

Gummata of the Heart. DR. JÜRGENS. (*Berlin. Klin. Wochenschrift*, October 13, 1891.)

The writer reports, in a paper on tumors of the heart, the case of a girl of nineteen who died suddenly. At the autopsy numerous small tumors were found buried in the walls of the heart which the microscope showed to be gummata. They had infiltrated nearly the whole of the right side of the heart, especially in the region of the tricuspsids. The endocardium and septum were also extensively implicated. The walls of the arteries and some of the veins showed well-marked sclerosis, and some of the arteries were completely occluded.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

212TH REGULAR MEETING.

DR. GEORGE H. FOX, *President, in the Chair.*

Moist Papular Syphilide.—Presented by DR. FOX.

The patient was an Italian with a recent papular syphilide scattered sparsely on the trunk and extremities. A few of the papular lesions had increased in size and presented the appearance of circular moist patches similar to lesions commonly seen on mucous membranes.

Tubercular Syphilide of the Lips and Tongue.—Presented by DR. FOX.

The lips of this patient were somewhat thickened, and upon being everted revealed two rows of red, raised and fissured tubercles. Similar lesions, though less developed, appeared on top and sides of tongue. A tuberculo-squamous eruption affected the left heel and plantar surface.

Regarding the first case, Dr. Taylor said the condition was somewhat unusual. The papules had taken on an elephantine growth; their surfaces had become ulcerated and covered by a mucoid secretion. The condition had been described by the French writers under the name of *papule diphtheroïde*.

He looked upon the lesion in the second case as a simple hyperplasia of the tissues, the result of the prolonged irritation of syphilitic lesions. He said that if there were no other lesions present on the body, it would be necessary, first, to eliminate epithelioma. Having done this, one would next think of old syphilis. As the man was a smoker the prolonged irritation from tobacco had been operative in producing the present condition. Microscopic examinations in similar cases had revealed only a hyperplasia of the tissues.

Dr. Fox remarked that by daylight there was no erythematous eruption present in the case he first presented.

Dr. FORDYCE said in several patients he had noted scattered papules over the body before the eruption of the general syphilitic exanthem.

Dactylitis Syphilitica (?)¹ Presented by DR. FORDYCE.

Dr. KLOTZ thought the patient had a syphilitic affection of the bones, although he showed no signs of hereditary syphilis.

Dr. CUTLER thought it was a dactylitis occurring in a serofulous subject.

Dr. TAYLOR said that, inasmuch as there was no history of syphilis, and the preponderance of evidence seemed to be in favor of serofula, he would accept this as the diagnosis. In syphilis you do not see so much breaking down of the tissues and pus formation as in this case.

¹ See page 148, April number of this Journal.

DR. LUSTGARTEN said he thought the whole process was syphilitic and the existence of so many foci would further tend to confirm that view. The patient's general condition was good; a slight degree of anaemia only being present, such as is seen in patients with gummata. He had seen cases which presented every appearance of scrofula heal up under the use of anti-syphilitic treatment.

DR. ALLEN considered the case one of tuberculosis of the joints. He did not think the therapeutic test of so much value in these cases, as not infrequently strumous lesions improved to a certain degree under the use of mercury and the iodides.

DR. PIFFARD said, independent of the skin lesions, the case impressed him as one of moderately developed struma, as such cases were called by the older writers. In regard to the matter of treatment, he regarded both the bichloride of mercury and the iodine preparations as anti-strumous drugs.

DR. FORDYCE believed that in exceptional instances the bichloride of mercury and the iodine preparations might exercise a limited curative influence in strumous affections in children. If given too long, however, harm generally resulted, while in the tubercular affections of adults he had never seen benefit result from their use.

DR. FOX thought that injections of Koch's lymph might prove of value in determining the diagnosis. He agreed that the lesions were such as are frequently met with in strumous children. He had not a high opinion of the value of mercury in struma, but thought the iodide of potassium would produce material benefit. Many chronic diseases are improved by the use of mercury and the iodide of potash, so that he did not believe much in the therapeutic test.

Arthritis and Orchitis.—Presented by DR. MORROW. [For full notes of the case see page 140, April number of this Journal.]

DR. LUSTGARTEN said the case was an extremely interesting one. It showed what ravages syphilis could make, and illustrated the difficulty in diagnosing the disease from *tumor albus*.

DR. FOX said the appearance of the patient's elbow and ankle would lead him to make a diagnosis of syphilis. He had seen many cases of syphilis with just such lesions. He had observed many cases of periostitis of the tarsal bones with great enlargement in connection with tubercular eruptions upon the skin, and at the New York Dispensary in former years this condition used to be called the "syphilitic hoof."

DR. ALLEN looked upon the case as one of syphilis from the rapid improvement which had taken place under the treatment.

DR. FORDYCE had seen the case in the service of Dr. Morrow at the New York Hospital, and could testify to the remarkable change that had been produced by the treatment. When he first saw the case, before any anti-syphilitic remedies had been given, he was convinced, from the presence of a number of grouped tubercles on the side of the neck, of the existence of syphilis.

DR. MORROW said the case came under his observation several weeks before, when the appearance of the elbow strikingly suggested a white swelling; it was certainly half as large again as now. His first impression that he had to do with a tuberculosis of the joints was modified by the opinion of the physician under whose care he had previously been, as the

treatment, based upon that supposition, had not been followed by improvement. He gave the patient iodide of potassium in large doses, and this treatment had been followed by the most remarkable improvement. The gummatous deposits at the angle of the jaw and the bend of the elbow healed, while the joint swellings and the deposit in the testicles diminished very perceptibly in volume.

Ulceration on the Dorsum of the Hand in a Hysterical Subject Cured by Hypnotism.—Presented by DR. HOWARD LILIENHAL. (By invitation.)

Ettie B., Aet. 17, hurt dorsum of left hand August, 1889. She says that at Chambers Street Hospital a needle was removed. Wound refused to heal. Incisions and counter-incisions. Efforts to close wound by suture failed. Antiseptic treatment the whole time. June, 1890, I first saw patient. In left middle metacarpal region was a greenish dry slough $1\frac{3}{4}$ by 1 inch in size. Round this a *trough* of suppuration, then, after a narrow indolent inflammatory border came the healthy skin. Slough evidently went to periosteum; middle finger useless. The whole affair was elevated considerably above the surrounding skin and this elevation or "bump" was hard and resisting like firm cicatrix or even bone. Discharge slight; odor foul. Treatment: Dressings and internal anti-syphilitic treatment; potass iodide up to 300 grains daily.

Late in August, 1890, under chloroform, complete excision of the slough and of all doubtful tissue. The slough merged into gelatinoid scar tissue which replaced the extensor tendon, encroached on the two neighboring extensors and was firmly adherent to periosteum. Everything unhealthy excised. Large defect sewn up and a long incision made parallel to wound to relieve tension. Dressing under plaster-of-Paris. On recovering from anaesthesia patient was for two hours somnambulist. Wound healed rapidly with linear scar, but in a few weeks this cicatrix grew broad and gelatinoid, then sloughed, beginning in the centre and spreading till the appearance was rather worse than when I first saw the case. Wound made to relieve tension healed firmly and permanently. Patient was now treated nearly a year with various dressings. Then seen by Dr. Lustgarten, who diagnosed profound hysteria with general and complete anaesthesia and absence of reflexes. At his suggestion hypnotism was tried and *all* other treatment stopped. Improvement was immediate. The slough grew rapidly smaller. I now had to leave town and on my return after three weeks the slough was again spreading. Treatment by hypnotism was again followed by improvement until now the slough amounts to merely a small superficial innocent looking crust or scab. March 1, 1892, patient is entirely well, the slough gone and replaced by soft healthy scar.

DR. BRONSON said the case was an extraordinary and unique one. The facts could not be gainsaid, neither could they be explained in any ordinary way. The assumption that it was a neurosis due to hysteria was the most tenable. The case was parallel to that of Louise Lateau, in whom stigmata were caused by intense concentration of the mind on certain parts of the body.

DR. ALLEN referred to an hysterical girl, who had been under his observation, with spontaneous multiple gangrene of the skin. He believed her case should be included in the same category as this one. Patients with so-called feigned eruptions or self-inflicted injuries did not always produce the

lesions themselves by the use of caustics, etc.; he thought they were frequently produced by the peculiar nerve influence which these patients could exert upon themselves by a species of auto-suggestion.

DR. LUSTGARTEN said such cases were usually met with by neurologists and not by dermatologists. He had occasion to refer, some time ago, to Krafft-Ebing's observations of certain necrotic changes in the skin produced by suggestion and auto-suggestion. Bernheim mentions the case of a girl to whom it was suggested in the hypnotic sleep, that a sinapism would be put on a certain part of her skin. The next day she returned with a blister on that part, although the skin had been covered with postage stamps and a bandage. One of Kaposi's cases of zoster gangrenosus atypicus had a complete hemianesthesia, and it is possible that other cases of spontaneous gangrene of the skin can be referred to similar nerve changes. It was difficult to understand how functional neuroses could produce necrosis of the skin; still, the other phenomena of hysteria were equally difficult to comprehend. Every precaution had been taken in this case to guard against simulation. During the period when the ulceration was extending, a marked bandage had been applied. On removal this was found to be unchanged, and yet beneath it the ulceration had extended. She gives a history of traumatism, but that must be taken with a good deal of skepticism, as these cases often pass into a state of auto-hypnotism, during which they suggest to themselves things which have not occurred.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY. FEBRUARY 11, 1892.

DR. E. L. KEYES, *President, in the Chair.*

Address of the President On the Proposed Plan for Conducting the Section in the Interest of the Younger Men.—DR. KEYES stated that he had heard the Genito-Urinary Section of the Academy discussed from an outside standpoint by those who criticised it in a rather hostile sense, on the ground that there was not sufficient reason for its existence. That the material which is ordinarily presented here belongs naturally to the surgical section, and that the division of labor into this particular field is not justified. The Genito-Urinary Section has now been in existence a little over a year, and it has done good work. The only way to disprove the criticisms made against it is to get up an interest in it and get together the younger men of the profession. With this object in view, Dr. Keyes proposed the seven following subjects, to be taken up in succession and discussed, one at each of the seven remaining meetings during the present year:

1. Pus in the urine: how to detect its source.
2. Blood in the urine: how to detect its source.
3. Ammoniacal and putrid urine: how to sweeten it.
4. Urethral fever: how to prevent and how to manage it.
5. Deep urethral spasmodic stricture: how to detect its cause.
6. Blood in the urine: what to do for it.
7. Prostatic albuminuria: how to distinguish it from renal albuminuria.

Case for Diagnosis.—Presented by DR. ALLEN. The patient was a man, about thirty-five years old. He presented himself in December with a hydrocele of the left side. He gave a history of gonorrhea two years ago,

and another attack eighteen months before. After the passage of a sound an orchitis had developed on the left side. Dr. Allen stated that he had operated on the hydrocele by the injection of pure carbolic acid, but there has been some return of the fluid. He presented the patient for diagnosis as to the condition of the epididymis on the left side, and the condition of the testicle and epididymis on the right side. There seems to be an unusual hardness about it. The point is, whether it is a simple chronic epididymitis, or possibly tubercular? The hardness has existed about eight months. The operation for hydrocele was done about two months ago.

DR. TAYLOR considered the condition as one not at all uncommon, in which you have an attack of epididymitis following the passage of a sound and resulting in a well marked induration either at the head or tail of the epididymis. As a result of the pressure on the vessels there has been this congestion of the tunica vaginalis and hence the dropsy. He did not see any necessity of invoking tuberculosis.

DR. BANGS stated that on the right side there was a simple hyperplasia, which might be due to trauma, caused by the passage of the sound. On the left side, however, a graver condition of affairs seemed to exist: the epididymis felt nodular. There is still a certain amount of fluid in the sac. A case of this kind, Dr. Bangs thought, should be kept under observation and the condition of the seminal vesicles should be ascertained.

DR. TAYLOR stated that it is a well known fact that any case of chronic epididymitis may become tubercular, but this patient gave no evidence of tuberculosis, either general or local. On the other hand, we know very well that from the continuous use of the sound we get just this condition.

DR. KEYES agreed with Dr. Bangs that this case presented some features which were not usually present in simple chronic epididymitis. In the first place, an epididymitis should not be quite as irregular to the feel as this one is. Furthermore, there is no reasonable excuse for the persistence of the inflammation in this case; and finally, the re-collection of the fluid in the sac, after the injection of carbolic acid, is exceedingly exceptional. Dr. Keyes stated, however, that he thought the case could not be diagnosed as tubercular at present.

DR. ALLEN stated that he had made a rectal examination and was unable to detect any deposit in the seminal vesicles.

DR. TAYLOR called attention to the fact that many cases of single or double epididymitis are on record, from traumatism or sounding or gonorrhoea, where the trouble has existed many years and where there was no tubercular degeneration. At the present day a suspicious swelling of the epididymis is too often classed as tubercular.

DR. KEYES stated that a chronic epididymitis generally lasts through life, whether it is the result of traumatism or gonorrhoea. In such cases there is generally a little hardness of the epididymis, either at the tail or the globus major, but it becomes symmetrically hard; it does not present sharp nodular points and it is not usually attended by hydrocele. If hydrocele does exist and is properly treated, it does not return.

DR. BANGS stated that the point he wished to convey was that a case of this kind, presenting such unusual features, should not have an off-hand diagnosis, but should be kept under observation.

The Chairman then presented a number of new instruments which he had recently brought from Paris.

Aspiration for Relief of Vesical Distension. Is it Always Practicable ?¹

—By DR. EUGENE FULLER.

DR. KEYES stated that he saw the patient after aspiration had been attempted and failed. Percussion over the abdomen gave flatness extending four or five inches above the pubes, and he was very much surprised that Dr. Fuller had not been able to reach urine. As soon as the patient was placed on the table, however, and before he had taken chloroform, whether from abdominal contraction or from some other cause, the flatness disappeared excepting over a very small area, and above that the resonance was tympanitic. Chloroform was administered and without very much trouble an instrument was made to elude the false passage, and fully three pints of very foul urine were drawn off. The man was semi-comatose and a formidable operation was not justifiable. Dr. Keyes said that the only similar case he knew of was one reported, he believed, by Dr. Stein some time ago, excepting one in which he (Dr. Keyes) recently took out both lobes of the prostate; the two lateral lobes were enormously enlarged and jutted out into the bladder and rubbed against each other. In Dr. Stein's case there was considerable enlargement of the prostate, but it was confined to the upper part of it.

DR. BANGS considered the case reported by Dr. Fuller a very unusual one. He has seen a number of cases where there was retention of urine, with a false passage; whenever he has found it necessary to resort to aspiration, he has never met with the difficulty described by Dr. Fuller. Dr. Bangs inquired what the members thought of aspiration as a method of emptying the bladder; whether a bladder could be satisfactorily washed out by that means. He has often employed it to relieve temporary distress, but has never felt satisfied, surgically, until he had entered the bladder from below, or by means of a radical operation.

DR. TAYLOR thought that aspiration was simply a means to be employed in an emergency, when it is impossible to enter through the urethra, to relieve vesical tension, and to allow the parts to adapt themselves to more successful manipulation by instruments later on.

DR. FULLER stated that he had seen one case where aspiration was repeated forty-eight times. The urine remained sweet.

DR. KEYES considered aspiration a misfortune in many cases, and thought that the less said about it and its possibilities the better. In the majority of cases, if a sufficiently severe physical condition exists to occasion retention, radical measures are called for, and the excuse might as well be taken to secure drainage and relieve the physical obstacles, unless, as in this case, there is a good reason for not doing so.

Selections.

Syphilitic Urethritis. DR. GRÜNFELD. (*Internat. Klin. Rundsch.*, No. 52, 1891.)

The author says that in syphilitic "tripper," due to the presence of the initial lesion in the urethra, the secretion is rather mucus in character, and is sometimes tinged with blood. The appearance of pus at the meatus does

¹ See page 190.

not of necessity mean gonorrhœa. The diagnosis of chancre in this situation is established by the discovery of induration. The infiltration persists for a long time.

In another class of cases chancres of the glans and frænum are attended with an inflammation and infiltration which extends to the urethral mucous membrane, and a discharge takes place which might be confounded with gonorrhœa.

More rarely, at the time of cutaneous exanthems, a muco-purulent secretion from the urethra, never becoming very profuse, can be attributed to urethral lesions corresponding to those on the skin. By means of the endoscope erosions are easily demonstrated. At a later period of syphilis, gummata may occasion symptoms of gonorrhœa, ardor urinæ, muco-purulent secretion, etc. Endoscopic examination showed this condition in one of the author's cases which presented a discharge corresponding to that of a gonorrhœa at the fourth or fifth day. [The term syphilitic gonorrhœa or syphilitic *tripper* should never be employed, because of the confusion to which it might give rise, and even "syphilitic urethritis" seems scarcely applicable, even if there is an inflammation of the canal in other parts than those occupied by the specific lesion.—Rep.]

CHAS. W. ALLEN.

Syphilitic Liver. DR. CANNIERS. (*Journal de Médecine de Bordeaux*, No. 3, 1892.)

The author presented a liver showing the characteristic lesions of an old syphilis. The capsule of Glisson showed star-like cicatrices, depressed and puckered. Some of them have a more or less whitish color, while others have a slightly bluish aspect. There are about twenty of these cicatrices upon the upper surface of the liver, and among them two present radiating furrows some ten centimeters in length. Upon the inferior surface the cicatrices appear more depressed, less numerous, and their central portion appears occupied by a fibrous nodule continuous with the striæ which shoot out from it.

Microscopic section shows the centre of the star-like scars to be formed by a mass of connective tissue of a white color, losing itself insensibly into the parenchyma of the liver tissue. If a microscopic section is made, it is seen that the star and its rays are made up of fibrous tissue, dense where here and there a few connective tissue cells appear. At a little distance from these lesions the cellular hepatic tissue is affected with a mild sclerosis. The liver cells appear separated and compressed. The liver, as a whole, is smaller than normal. Upon the surface of the organ there are numerous traces of former perihepatitis, and the left lobe presents adhesions to the spleen.

CHAS. W. ALLEN.

Syphilis of the Kidney. DR. ISRAEL. (*Deutsch. Med. Woch.*, No. 1, 1892.)

The writer reports two instances in which, contrary to the teachings of works on surgery, syphilis of the kidney occasioned a tumor which could lead the surgeon into error. Two forms of syphilitic kidney may be encountered, interstitial nephritis and gumma.

In the case of a girl of twenty-three, after increased thirst, stomach cramps and frequent calls to urinate, continuous pain in the back was complained of, and later on localized pain in the right side. There was loss of flesh, and a tumor of the kidney could be made out. The diagnosis was un-

certain. Anti-syphilitic treatment was instituted and appeared to give good results for a time, but as collections of flattened cells agglomerated into rounded masses and surrounded by a species of girdle composed of fusiform, cells began to appear in the urine in the form of a whitish deposit, an exploratory incision was made, the kidney found so altered that it was finally extirpated. Recovery was rapid, but examination showed the condition to be none other than syphilitic interstitial nephritis with hyperplastic peri and para nephritis.

The second case was a male, thirty-nine years old, with syphilitic and malarial antecedents. A continuous pain was complained of on the left side, with swelling at the tenth rib. An abscess of the spleen was thought of, an incision made, but only a yellowish white curdy material escaped, without pus, and a fistula remained. The diagnosis tuberculosis of the kidney was now made, and following the course of the fistula, the kidney was extirpated with some difficulty, and recovery was slow. Examination of the kidney, which was indurated, showed that there was no trace of tuberculosis, but gummy degeneration.

CHAS. W. ALLEN.

Mercurialism in Syphilis. DR. LANG. (*Centrab. für die ges. Thr.*, No. 1, 1892.)

The writer says nephritis may be an early sign of acute mercurial poisoning and for this reason examinations of the urine in early syphilitic treatment should be made often. Of course a nephritis may be due to the poison of the syphilis and it may be difficult to decide this point. Albuminuria, bloody urine with blood casts and cell detritus coming on suddenly and quickly disappearing may be caused in later stages by a gumma in course of breaking down. If albumin and casts appear soon after a mercurial course, mercury may be suspected as the cause, and probably with reason, if the symptoms appear only after the mercurial treatment was instituted, and if the symptoms disappear when the drug is stopped. Besides, mercury may be found in the urine by careful test.

CHAS. W. ALLEN.

Therapeutic Notes on Syphilis.

DR. EISENBERG recommends as a mouth wash in inflammation of the mucous membrane a five per cent. solution of salol in alcohol to be diluted with water at time of using.

DR. LYDSTON says the following formula makes the best application he knows of for irritable oral, lingual and pharyngeal lesions.

℞ Ac. carbol. gr. x
Iodini resubl. gr. v
Menthol gr. x
Ol. eucalypti ℥ ij
Glyceriti tannin ℥ ij
Boro-glyceride q.s. ad ℥ i
M. S. apply with brush.

DR. TURNBULL advocates for the constitutional treatment of syphilitic ear affections the following.

(a.) ℞ Red iodide of mercury 15½ grains.
Iodide of potassium 13 drachms.
Distilled water 2 fluid ounces.

M. Dissolve and filter, then add simple syrup until the whole measures 50 fluid ounces S. One tea-spoonful 3 times a day.

(b.) R Bichloride of mercury $\frac{1}{2}$ of a grain.
 Arsenious acid $\frac{1}{2}$ of a grain
 Pyrophosphate of iron 6 grains.

M. and make xxiv pills S. One pill 3 times a day.

DR. FEIBES employs as a mouth wash and gargle in mercurial stomatitis

R Alumin. acet. gram. 10
 Aq. destilat.
 Aq. aurant. flor. 55. 200

DR. AUBERT has caused rapid disappearance of certain syphilides, especially acneiform syphilides, by the application of a compress wet in a one per cent. solution of corrosive sublimate. After six or seven hours a phlyctæna is produced similar to that caused by a fly blister. Diachylon plaster is applied to the surrounding skin to protect it from the vesicating action.

DR. GRIFFIN has obtained excellent results in treating naso-pharyngeal and laryngeal syphilis with the following which may be used as a gargle, injection or spray

R Calomel. gram. 4
 Pulv. Opii gram. 2
 Aq. Calcis gram. 375

DR. Désiré finds exalgine in dose of four to twelve grains to be a reliable drug for the relief of persistent syphilitic bone pains which ordinary treatment will not cure. (I have found exalgine to act well in some cases of syphilitic headache and night pains. C. W. A.)

DR. VAN HAREN NOMAN after five years' trial of the various mercurials for hypodermic use prefers the yellow oxide. Since 1888 he has made 1572 injections. A cubic centimetre of a one in twenty solution in vaselin or sterilized olive oil is sufficient for most recent cases. In case of urgency two injections of five centigrams each are given. In lighter cases two and a half to three centigrams once a week, suffice. Six or seven injections constitute a cure. Little pain is occasioned and never an abscess.

DR. RIETEMA employs by preference the tannate of mercury, corrosive sublimate or calomel—the latter especially in children. In the first year and a half after infection he rarely uses iodine and mercury combinations. Of the tannate about a grain and a half are given three times daily immediately after eating. He believes that while the mouth should be kept clean, too energetic brushing of the teeth is detrimental, because he has noticed that patients who are not accustomed to use the brush produce a state of irritation of the mucous membrane by its too free use which predisposes to stomatitis instead of guarding against it. When the bichloride is used the patient takes twenty-five minims of a 1-1000 solution in distilled water (equivalent to 1-40 gr.) three times a day just after meals and well diluted. This dose is increased according to the effect upon the symptoms, till 1-20 gr. is reached.

For affections of the scalp the following is recommended after thorough cleansing with a bicarbonate of soda solution.

R. Hydrarg. ammoniat. ʒi
 Hydrarg. bichlorid. gr. iij
 Vaseline.
 Lanolin. ʒʒ ʒ ijss
 Ol. rose. gtt. v

DRS. WELLS and HUNTER, according to the *Cincinnati Lancet Clinic*, treat palmer syphilides as follows: A common hat-box is taken and turned topside up; a hole is cut in the side large enough to pass the hand through; a small tripod with a porcelain vessel thereon with some calomel in it, is placed in the box with a spirit lamp beneath. The lamp is lighted, the hand introduced and fumigated. The hand being held immediately above the capsule, the sublimated calomel is deposited on the lesions. Good results are claimed by the writers.

CHAS. W. ALLEN.

Renal Neuralgia. DR. FELIX LEQUEN. (*Annales des Malades des Organes génito-urinaires*, Aug., Sept., and Nov., 1891.)

The author, after referring briefly to the literature of the subject, and the views formerly held regarding the significance of the symptom, reports a rather striking case occurring in the service of Prof. Guyon.

The patient, a man 26 years of age, had suffered from repeated attacks of violent pain in the region of the left kidney—extending downward to the testicles: there was also hæmaturia, vesical tenesmus and vomiting. The presence of calculous disease of the kidney was diagnosticated, and an exploratory operation undertaken. No calculus or other pathological condition was found, which would in any way account for the symptoms, but the effect of the operation seemed, for a time at least to afford relief to the patient.

Similar cases are reported by Sobater, Durham, Reynaud, Tiffany and others. In one instance a subsequent autopsy, and in another nephrectomy, demonstrated the absence of disease of any kind.

The author concludes that *simple renal neuralgia* exists, and may produce symptoms identical with those which characterize a neuralgia due to calculus.

These neuralgias occasionally occur as a manifestation of chronic malarial poisoning, of neurasthenia, or as a result of a traumatism—they are, however, more commonly found associated with disease of the nervous system, as locomotor ataxia; with the genito-urinary organs, as vesical calculus, prostatic disease or some pathological condition of the other kidney; with biliary calculus; ulcer of the duodenum; aneurism; or disease of the vertebral column.

In the author's opinion, the only reliable data upon which to base an opinion as to whether, in a given case, the neuralgia is a simple one, or due to the presence of calculus, are to be found by careful observation, regarding the effect of bodily movements upon the pain and hæmaturia. If these symptoms are produced or exaggerated by exercise, and cease with repose, to be again excited by a renewal of the bodily movements, calculus may, with great positiveness be diagnosticated.

In the paragraph devoted to treatment, the author calls attention to the

fact that in a large percentage of the cases, permanent relief has been afforded by the exploratory operation.

In explanation of this, and other peculiarities of this condition, attention is directed to the theory advanced by Louis McLane Tiffany, who believes the cause of the symptoms to be an active congestion of the renal tissue, and that the relief is due to the free division of the fibrous capsule.

G. E. BREWER.

Relationship Between Gonorrhœal Inflammation in the Male and Sterility.

E. FINGER. (*Internal. Centralblatt für die Phys. und Path. der Harn und Sexual-Organ.* Band III., Heft 1.)

To Næggerath he gives the credit of first calling attention to the frequency of gonorrhœa as a cause of this condition. Recent investigation upon this subject by Süsser, Schwarz and others, show the fallacy of the view, that in obstructive disease of the epididymis, vas deferens or ejaculatory ducts alone are to be sought the causes of male impotence.

The author divides the causes of impotence in male into two classes: the first, where the *potentia coeundi* is destroyed, this may be the result of congenital or acquired deformities or other mechanical impediments, to incomplete erection with premature ejaculation or to the entire absence of erection.

In the second class the *potentia generandi* is absent. This may be occasioned by absence of ejaculation, or to absence of living spermatozoa—in the ejaculated semen. (*azoospermia, oligospermia, necrospermia.*)

In *acute anterior urethritis*—diminished vitality or death of the spermatozoa may be occasioned by contact with pus.

In *acute posterior urethritis*, the reflex sexual irritability is usually heightened through inflammatory irritation of the caput gallinaginis. This may give rise to frequent pollutions, premature ejaculation and spermatorrhœa.

More important than the acute, are the *chronic* inflammations of the urethra. These, in the *anterior portion* result in stricture, inflammatory induration and peri-urethral abscess; which may give rise to incomplete erection or curvature of the penis, rendering the sexual act mechanically impossible, or to obstruction to the flow of semen, on account of imperfect muscular action or urethral narrowing.

It is in *chronic posterior urethritis*, however, that we find the most frequent cause of impotence in the male. Here usually we have to do with a chronic glandular inflammation, giving rise to an abundant secretion from the prostatic glands of a fluid which is neutral or but slightly acid in reaction, and containing numerous pus cells. As the normal reaction of the prostatic fluid is strongly acid; and as the activity, if not the vitality of the spermatozoa is dependent upon contact with this fluid, its altered condition results in a diminution of the impregnating power of the semen. Cicatricial contractions, occurring about the openings of the ejaculatory ducts, caused by long-standing inflammation of the deep urethra or by a follicular prostatitis, may also give rise to impotence. *Acute prostatitis*, resulting in abscess, especially when the sac opens into the urethra, may be the occasion of impotence on account of the resulting destruction of the seminal vesicles or their afferent ducts. *Epididymitis*, inflammation of the spermatic cord and seminal vesicles, give rise to impotence, owing to

mechanical obstruction to the flow of semen—and to contamination of the fluid by the products of inflammation.

Complete resolution, with absorption of the induration may occur, and is frequently accompanied by restoration of function.

G. E. BREWER.

Experiments Regarding the Action of the "Cut-off" Muscle, and Irrigation of the Bladder without a Catheter. H. FELIKI, Budapest. (*Internat. Centralblatt für die Phys. und Path. der Harn- und Sexual-Organen*, June, 1891.)

This author reports, first, a series of experiments which conclusively show that fluids, under ordinary conditions, can not be forced beyond the compressor muscle, into the deeper urethra and bladder, by means of the ordinary urethral syringe.

This was shown in the first place, by carefully depositing methyl violet powder in the membranous urethra by means of an endoscope, and afterwards making an injection of 10 cc. of clear water into the anterior urethra and retaining it in the canal for several minutes by compressing the meatus. The fluid was then allowed to escape and the amount carefully measured. In thirty-five experiments the amount of the re-collected fluid never fell below 9 cc., and in no instance was it colored by contact with the powder.

The second series of experiments consisted in an injection into the anterior urethra of a concentrated solution of glucose; this was afterwards allowed to escape, and the residuum still adherent to the urethral wall carefully removed by means of cotton swabs. The patient was then made to urinate, and the urine tested quantitatively for glucose. This experiment was repeated forty-one times with the result that in four instances only was a trace of glucose detected, and in these four cases the total amount was found to be considerably less than the amount contained in one drop of the original fluid injected.

Further experiments, however, proved that if, after thoroughly emptying the bladder, the patient was placed upon his back, and the nozzle of an irrigator or fountain syringe was introduced within the meatus, and the irrigating reservoir raised to a height of two metres, the pressure of the fluid would soon overcome the resistance offered by the cut-off muscle, and flow freely into the bladder.

In the treatment of cystitis this method was found to possess two very marked advantages over the method usually employed, in that it does away with the use of the catheter, always a fruitful source of contagion, and insures the thorough cleansing of the posterior urethra, the seat of most of the trouble in the majority of cases of so-called cystitis.

G. E. BREWER.

Evolution and Treatment of Strictures Due to an Incomplete Rupture of the Perineal Urethra. PROF. GUYON. (*Annales des Maladies des Organes génito-urinaires*, 1891.)

In the experience of this author strictures of the perineal urethra, occurring as a result of traumatic rupture of the canal, even though the injury be slight, are often followed by the most serious consequences.

The reason of this is, that the development and contraction of the cicatricial tissue in this region, is so rapid that it produces a marked obstruction to the flow of urine before the bladder walls have become sufficiently

hypertrophied to compensate the urethral narrowing. As a result there follows dilatation of the bladder, ureters and kidney pelves, with the resulting urinary infection. These strictures are especially rebellious to treatment as recontraction rapidly follows even the most thorough division.

The treatment advised by Prof. Guyon is resection of the diseased area.

G. E. BREWER.

Generalized Syphilitic Adenitis. DR. MRÁČEK. (*Le Bulletin Médical*, January 13, 1892.)

The author presented two quite rare cases at the Vienna Medical Society. In the first a man three months after contracting syphilis developed a generalized seleradenitis. Not only were the inguinal glands much enlarged but at the elbows one could feel a whole chain of ganglia, where, as a rule, only a single supra-condyloid enlargement is to be made out. In the neck and axillary regions the ganglionic enlargement could be plainly seen as well as felt. In the second case a cartilaginous tumor adherent to the periosteum reached from the internal angle of the eye across the bridge of the nose to the opposite cheek. The surface was partly ulcerating and partly cicatrized. There was no antecedent specific history and antisymphilitic treatment had been tried in vain. The diagnosis of diffuse hypertrophic syphiloma was, however, made and iodide given in daily quantity of forty-five grains, besides daily inunctions for about a month effected a cure.

CHARLES W. ALLEN.

Malignant Precocious Syphilis. DR. BROUSSE. (*Annales de Dermat. et de Syph.*, December, 1891.)

The writer relates a case of precocious syphilis of a malignant type. This belongs to a class of cases characterized by the precipitation of the natural evolution of the syphilis, and by the appearance of true tertiary manifestations sometimes very shortly after the chancre. Bandonin has recently collected sixty-two cases of malignant precocious syphilis, and concludes that it is not so rare as classical authors state it to be. The case here recorded deals with a man of thirty-six, cachectic, scrofulous, and addicted to alcoholic excesses. In less than twenty days after the appearance of the chancre a bullous eruption appeared. They were at first small and filled with a clear fluid but gradually increased in size and became transformed into large pustules. These lesions quickly ruptured and the pus dried into thick crusts of a brownish color and presented the stratified oyster-shell appearance characteristic of rupia. He was given two teaspoonsful of Van Swieten solution daily and was discharged cured of the attack at the end of sixty-eight days. During the succeeding two and a half years there were five recurrences, each more serious than the other. The marked shortening of the period of second incubation noted in this case is quite frequent in malignant syphilis, and the early appearance of constitutional symptoms is no less marked a feature than the precociousness of what are usually termed tertiary signs, as was indeed the case in the instance reported where lesions habitually considered as "late" furnished the first manifestations of the constitutional disease. The question arises in the presence of such an irregular course, is the virus here of an especially malignant nature or must we only blame the nature of the soil upon which it flourishes? The author believes that in dealing with this difficult problem we must be governed in a measure by recent pathological studies showing that the pathogenic value

of certain microbes varies with the culture medium, but in most cases we are forced to search for the cause of malignancy on the side of the *terrain*. Bassereau taught that if the chancre was of malignant type the succeeding syphilitic manifestations were also apt to be of the same nature. In the instance in point this was not the case, for the history states that the initial lesion was but slightly marked and rapidly disappeared.

Mixed treatment is given preference over mercury or iodide alone or a non-specific tonic treatment advised by some for such malignant cases. Still a tonic course is advised when the system seems to need it in order to resist subsequent attacks.

CHARLES W. ALLEN.

On An Epidemic Skin Disease Somewhat Resembling Eczema and Pityriasis Rubra. THOMAS D. SAVILL. (*Brit. Journ. of Dermat. Feb. and March 1892.*)

Under this title, the author describes a peculiar form of skin disease which apparently appeared in an epidemic form in the Lambeth Infirmary. The cases which occurred were 163 in number—89 males 74 females—and they were observed between July 1st and October 31st, 1891 and represented 19.2 per cent. of all the patients who came under treatment during that length of time. His definition of the disease is: A contagious malady, in which the main lesion is a dermatitis, sometimes attended by the formation of vesicles, and always resulting in a desquamation of the cuticle; usually accompanied by a certain amount of constitutional disturbance and running a more or less definite course of seven or eight weeks.

The eruption presented three stages:

1. A papulo-erythematous stage, which lasted from three to eight days.

The eruption began as an erythematous papular rash, the skin being considerably thickened and indurated and in parts oedematous. The margin of the patch faded out and terminated sometimes with and sometimes without an abrupt raised edge, a few papules being scattered beyond. Instead of the papular rash, the first symptom was in some cases a raised blotch of congestion, having an abrupt margin and a circular outline, or in others, there were one or more flat papules which enlarged and resembled tinea circinata.

2. Stage of exudation and desquamation—three to eight weeks.

Confluence of the rash taking place, the appearances for days and weeks would be a crimson thickened and indurated surface, continually desquamating in scales and flakes of all sizes mixed with dried up exudation. According to the presence or absence of the latter, there were two varieties of the disease—a moist type, which ran a more rapid course and in which the papules became vesicles and a copious exudation, such as is seen in eczema, took place; the second variety, a dry one, was more prolonged, the skin remaining dry throughout, no exudation occurring and the appearances being those of a pityriasis rubra.

3. Stage of subsidence.

By degrees the inflammation subsided, the skin remaining thick, indurated, polished in appearance, brown in color, sometimes raw or smooth, shiny and parchment-like, with cracks and fissures here and there. In some cases, eversion of the eyelids was noted and in some of the older people, a purpuric condition. Besides the features mentioned, it was found that the eruption was prone to appear first in the folds of the skin around the flexures of the joints, under the breasts, etc., and then to appear successively on

different parts of the body, the extension in the majority of the cases being from neighboring parts and the patches not coming out simultaneously on distant and unconnected parts. Frequently, the eruption became manifested and then in a few days faded away, but later took on fresh activity and progressed with redoubled vigor.

The hair and the nails shared in the process in its later stages and alopecia occurred even where no eruption had been, for though in about half of the cases the entire body became implicated, yet in many, the disease was limited to only a few patches. The subjective symptoms consisted of severe itching, a sensation of irritation and of burning pain. In severe cases, there was a sour odor emanating from the patients. Constitutional symptoms were always present in some degree. The most constant were anorexia, excessive prostration and great thirst. Sometimes, diarrhoea and vomiting were present. The asthenia at times preceded the eruption and its intensity varied according to the severity of the case, in those severe in character being the most frequent cause of death. The tongue would at first be thickly furred, then become raw. In severer cases it was dry, the saliva thick, the teeth covered with sordes.

The temperature was at first normal and even subnormal. In later stages going up to 100° or a little more and showing morning remissions and evening exacerbations.

The urine was examined in 72 cases and albumin found in 36. The albuminuria was present when a considerable area of the skin was involved, and was found either during the height of the disease or in the later stages. The course of the process was a slow one, it began and ended gradually. Its average duration in males was 7.24 weeks, in females 7.32 weeks and in all cases 7.27 weeks. Relapses were a common feature. Twenty-eight died, the deaths resulting from weakness, coma without delirium supervening. There were also in the fatal cases, attacks of dyspnoea, which came on without lung symptoms. In some pneumonia or pleurisy occurred and in all there was cardiac weakness, the pulse being feeble, of low tension and irregular.

As complications, inflammation of the conjunctiva, iritis and irido-cyclitis may be mentioned and as sequelae, boils and carbuncles. After subsidence of the eruption, pigmentation remained.

Creolin in the strength of one per cent. and ether in the form of a lotion or an ointment acted well. The irritation was relieved by warm soda baths, vaselin, zinc oxide ointment, etc. Internal medications, with the exception of stimulants, like whiskey, was useless.

Etiology: Most of the cases occurred in persons in advanced life, in children and young adults there being only light and trivial attacks. The average age of all affected was 64.8 years. The male sex and age, were the especial predisposing causes, but previous illness and hospitalism were almost as important.

The author sought for the existing causes of the disease in the food, soap, water, climatic conditions and soil and excluded them all, but he thinks the seasons play probably some part. From his investigations, however, he is inclined to regard the disease as a contagious one due to the presence of a specific living organism, which probably attacks the unbroken skin and is introduced into the system in that way.

His reasons for this are, that he found constantly in the serum and ex-

udation an aërobic diplococcus, which grew in all media, and which though bearing some resemblance to the staphylococcus albus, yet differs from it in many points. Independently of himself, Dr. Russell found the same organism in the blood, skin and tissues of patients with the disease. Animals do not appear to be immune, for the author's dog, which accompanied him in his rounds through the wards, acquired the disease, and Dr. Klein produced it in a rabbit by the inoculation of a sub-sub-culture originally obtained from an unbroken vesicle. From the rabbit's blood and epidermic scales, pure cultures of the same diplococcus were obtained.

Anatomically, an effusion of cells and fluids was found between the derma and the epidermis, while in the former, there was in the early stages an excess of leucocytes and in the later, of fibrous tissue.

The author discusses at some length the nature of the disease and states, that he is inclined to believe that it belongs generally in the eczematous group, but the result of microbe infection. He suggests for it the name of "epidemic exfoliative dermatitis."

GEORGE T. ELLIOT.

Book Reviews.

Die Vererbung der Syphilis. By ALFRED FOURNIER, Professor an der medicinischen facultät in Paris. In einvernehmen mit dem Verfasser bearbeitet von DR. ERNEST FINGER, Dozenten an der Universität in Wien. Leipzig und Wien : Franz Deuticke, 1892. 8vo. p. 177.

IN making a German translation of Professor Fournier's recent monograph on Hereditary Syphilis, Dr. Finger has not been satisfied with turning the text into a language which a larger number of his own countrymen could read with greater ease, but, with the consent of the author of the original work, he has added to almost every chapter comments, criticisms and annotations of his own, which, while often partaking much of the nature of a critical review, add greatly to the interest of a work, most worthy of translation and critical study.

While agreeing in the main with the author's theories and beliefs, many of which are elaborated, here and there, views have been expressed to which the translator takes decided exception and states plainly the grounds upon which he bases his opposition. Thus on page 109, in discussing the chapter which treats of Colles or better Baum's law he claims that the second of the following Conclusions of the author is faulty :

"1. That women who are the mothers of children rendered syphilitic by the father have no cause to fear infection from these children.

"2. They have nothing to fear for the reason that they are already syphilitic and can acquire no new syphilis."

He claims that Fournier in common with many others confounds the immunity which these mothers possess with syphilis which he believes they do not possess. They are immune but not syphilitic, and at some length he argues out his case. Again on page 120 the question is taken up from the

standpoint of latent conceptional syphilis and over four pages are devoted to an attempt to show that these mothers had acquired immunity without having been syphilitic.

The work, giving as it does the views of two men eminent in this branch of medicine, will commend itself to those who read German more readily than French, and especially to all those particularly interested in this important question.

C. W. A.

Diseases of the Skin. A Manual for Practitioners and Students. By W. ALLAN JAMIESON, M.D., F.R.C.P., Lecturer on Diseases of the Skin, School of Medicine, Edinburgh. Third Edition, Revised and enlarged. In one octavo volume of 656 pages, with woodcut and 9 double-page chromo-lithographic plates. Cloth, \$6. Philadelphia: Lea Brothers & Co., 1892.

The popularity of this book in Scotland is shown by the fact that this is the third edition in less than four years. Its title page says that it is a "manual," a hardly applicable term when we compare the size of the book, 656 octavo pages, with the definition of the term, viz.: "A small book, such as may be carried in the hand" (Worcester). The justification for its use is, perhaps, to be found in the fact that it is not a systematic and complete treatise on skin diseases. While the principal diseases of the skin are described, not a few of the least important ones are not mentioned. Moreover, and curiously enough, the treatment of leprosy and of syphilis is entirely omitted.

The value of the book, it seems to the reviewer, lies in its being a pleasantly written account of the author's personal experience, illustrated by and illustrating the work of other authorities. He has chosen the narrative style. The matter is divided into chapters with such titles as: "Erythema and its allies and varieties"; "Nettle rash and its associates"; "Lichen"; "Pustular Diseases"; "Acne and a Bad Complexion"; and the like. This results in making a thoroughly readable book, but a sometimes odd combination of diseases. It would greatly add to the convenience of the work if the introduction of a new disease were marked by a change in the size of the type, so that the eye would at once note it. Still, the present edition is much fuller and better than the first one; and perhaps the typography of the book is not to be laid to the author's account.

About thirteen per cent. of the book is occupied by the recital of personal cases. The various references to other authorities show the author's wide reading. Etiological matters are evidently very attractive to the author, and we are glad to note the stress he puts upon errors of diet and digestive disturbances in this connection. This naturally and properly leads him to insist upon the necessity of directing the diet and addressing proper remedies to the cure of general diseased conditions in the treatment of dermatoses.

We note as peculiarities of our author, the following: Pilocarpine administered hypodermically is a favorite remedy in a number of diseases. Pemphigus is held to be a form of dermatitis exfoliativa. Pityriasis rubra pilaris is said to be the same as Hebra's lichen ruber acuminatus, and, together with pityriasis maculata et circinata, allied to psoriasis. Peliosis rheumatica is considered to be a form of erythema multiforme; and dermatitis papillaris capitis a variety of sycosis.

We are surprised that he has not found Lassar's paste suitable for cases of moist eczema, as it is for just such cases that we have found it most useful. We wonder at his enthusiasm for gelatine preparations, or "glycerine jelly." There must be either something in the air of Europe, or in the patience of Europeans to account for the popularity of these preparations across the ocean. In this country they have not become popular because they take too much time and trouble, and never "jell." It seems remarkable that our author has lost sight of heredity as a cause of both hirsuties and baldness. It seems to us that this one factor plays the fullest rôle in the causation of both states. We would call the author's attention to the omission of the C. from Jas. C. White's name on page 295. This is the only typographical error we have noted.

To say that the book now before us is published by Lea Bros. & Co., of Philadelphia is synonymous to saying that the paper, type and binding are just as they should be. The nine colored illustrations in the book are all of rare cases.

G. T. J.

The Pocket Pharmacy. With therapeutic index. A Résumé of the clinical applications of remedies adapted to the Pocket-case, for the treatment of emergencies and acute diseases. By JOHN AULDE, M.D., New York: D. Appleton & Co. 1892.

This brochure of some two hundred pages furnishes an alphabetical index to certain diseases whose indications for treatment, are supposed by the author, to be best met by the selection of drugs herein given.

The selection of remedies, to be carried in the pocket-case in the form of tablet triturates, is the outcome of the author's personal experience in general practice.

The writer believes that the manifestations of acute pathological processes are more promptly controlled by frequently repeated small doses of remedies than by the ordinary therapeutic measures. As a guide to the employment of remedies in this manner the little work cannot help but prove of service, as well as serving to stimulate the physician to a more careful study of the indications for the use of drugs in individual instances. The book is full of useful and novel hints for the application of drugs.

Bacteriological Diagnosis. Tabular Aids for Use in Practical Work. By JAMES EISENBERG, Ph.D., M.D., Vienna. Translated and augmented with the permission of the author, from the second German edition, by NORVAL H. PIERCE, M.D., Chicago, Ill.; Philadelphia and London: The F. A. Davis Co., Publishers, 1892.

The growing importance of bacteriology not only in laboratory work but as a method of diagnosis has rendered desirable such a work as the present.

The specific differences of the various non-pathogenic and pathogenic bacteria are presented in the form of tables which render the work one of easy reference to the workers in this field.

In an appendix the technique used in the cultivation and staining of bacteria are given.

The fact that the work has been universally commended by the German medical press is sufficient guarantee of its worth.

Items.

The Brooklyn Dermatological and Genito-Urinary Society—This Society was organized on March 11, 1892 with Dr. S. Sherwell, President, Dr. A. E. Suyrie Vice-President and Dr. G. D. Holsten Secretary-Treasurer. The meetings of the Society, which are private, will be held on the first Friday of each month and will be mainly devoted to the presentation of clinical cases.

The membership of the Society which has been limited to fifteen, already has enrolled upon its list besides the names given above, the following : Dr. J. M. F. Winfield, Dr. H. H. Morton, Dr. H. W. Rand, Dr. F. A. Jewett, Dr. C. Sheldon and Dr. F. C. Raynor.

A Rare Case of Gonorrhœal Inflammation of the Vas Deferens and Seminal Vesical.—MAURIAC (*Ann. de dermat. et syph.* 1891, No. 6).

The writer relates the case of a man forty-one years of age who developed during an acute attack of gonorrhœa an inflammation of the right vas deferens which could be distinctly felt as a hard painful cord, and on account of the sparseness of the patient could be followed into the pelvis. A rectal examination revealed an enlargement of the corresponding seminal vesical. The affection terminated in recovery, with no implication of the epididymis or testicle.

Nephritis in Early Syphilis.—LACORCHÉ AND TALAMON. (*La Méd. moderne* Nov. 10, 1891).

The writers report the case of a man aged twenty-eight years who was treated for syphilis shortly after infection. Three months later he developed œdema of the face and feet and at the same time had albuminuria and mucous patches. Treatment directed to the nephritis was without avail, but under the inunction cure an improvement showed itself. The omission of the mercurial inunctions caused a decided relapse of the kidney inflammation which again improved and was finally cured by the resumption of the inunctions.

The writers conclude that early syphilis may produce a nephritis which can become chronic, but which is curable by antisyphilitic treatment. The symptoms produced by this form of nephritis are the same as those from the large white kidney.

Dr. Unna's Prize for 1891.—Dr. Zenthoefcr of Stallupoenen received the prize for the best essay in 1891. The subject given by Dr. Unna was, "The topography of the elastic tissue of the skin of adults."

The prize for 1892 will be awarded to the best paper on the following subject : "The disappearance and regeneration of the elastic tissue of the skin under different pathological conditions."

The essays competing for the prize should be in the hands of the publishing house of Leopold Voss, Hamburg, by the 1st of December, 1892. The amount of the prize is 300 marks.

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Original Communications.

CASE OF LYMPHANGIOMA.

BY

M. J. EPSTEIN, M. D.

Assistant to the Dermatological Department of Missouri Medical College, service of Dr. Hardaway; Surgeon to Genito-Urinary Department of South Side Dispensary.

MRS. B. R., aged 40, native of United States, stout and healthy in appearance, came to my office January 2, 1892, complaining of a very annoying skin affection. There is no history of any skin disease in the family. First menstruated at the age of thirteen. Has never been pregnant. Menses regular, scanty and accompanied by considerable backache. Has never been addicted to the use of intoxicating drinks. Contracted syphilis about seventeen years ago, and for several years afterwards she suffered from lesions of the throat and mouth. Fifteen years ago she had a severe attack of erysipelas of the face which she claims to have acquired by washing the clothes of some person who was afflicted with that disease. At that time she was delirious and confined to her bed for five weeks. Seven years ago she had some painful inflammation of the pelvic organs. During the past fifteen years she suffered from malarial fever, the paroxysms recurring every seventh or fourteenth day.

The disease for which she consulted me first manifested itself sixteen years ago, when she noticed "fine scattered pimples" in the hypogastric region. The pimples increased in number and size and during the following year another patch formed on the left buttock.

Seven years ago she recovered entirely of this skin disease, so that nothing could be seen, and she remained well for three or four months. It then reappeared at the same points.

On examination I find a very peculiar looking patch occupying the pubic, hypogastric, right and left inguinal regions. The central portion of this consists of a large pinkish elevated plaque, having an uneven surface and a sharply defined irregular outline. This plaque extends downwards involving the labia majora to their posterior extremity, converting the labia into folds an inch thick, in their transverse diameter. From the posterior extremity of the left labium the disease can be traced to the posterior surface of the left thigh, being continuous with the plaque as displayed by photograph. (See Fig. 1.)



FIG. 1.

Surrounding this plaque in the pubo-hypogastric region can be observed a number of isolated wart-like growths of various sizes ranging from the head of a pin to a pea. At some places these growths are confluent, forming groups or clusters. The intervening skin is slightly pigmented, but otherwise seems to be normal. When any of these growths, or any point of the plaque is pricked with a needle, a clear, transparent gelatinous fluid slowly exudes and continues to escape for three or four hours.

Most of these growths or so-called vesicles are of a pinkish

color with thick walls and here and there exhibit vascular streaks; some of the smaller ones have transparent walls so that the clear fluid contents can be distinctly seen, resembling the vesicles of eczema. Just above Poupart's ligament on the left side, can be seen a red streak, which extends from the plaque to a point about two inches to the inner side of the anterior superior spinous process of the ilium. It has a serpentine course, and a number of minute colorless vesicles can be seen directly



FIG. 2.

over it. When these are punctured they give exit to a clear gummy fluid.

On the left buttock there are two distinct clusters of vesicles, about half an inch above the gluteo-femoral crease. The inner one first appeared about fifteen years ago. The outer one developed three years ago. Surrounding these there are a number of disseminated vesicles. (See Fig. 2.)

The anterior surface of the left thigh presents a diffuse redness with a few minute deep-seated vesicles at various points

along the inner portions. When punctured they discharge the characteristic fluid.

The upper half of the posterior surface of the thigh is slightly erythematous and rough, and along the central portion is a large cluster of vesicles measuring seven inches in the vertical diameter and about two inches in the transverse. This is not raised so much above the surface as the other plaque but is otherwise similar and discharges fluid abundantly.

On inspection of the vulva find the labia minora considerably hypertrophied, and also the carunculæ myrtiformes somewhat thickened.

On microscopical examination of the fluid from the vesicles find lymph corpuscles.

The internal organs appear to be normal. The urine contains no sugar, nor albumen. Specific gravity 1022. The subjective symptoms are aching, burning and itching in the affected regions. Whenever the so-called vesicles are filling up and ready to burst the itching is intense, and is not allayed until rupture of vesicles has taken place.

In order to protect her garments she finds it necessary to wear cloths over the diseased parts constantly, and these become saturated with the fluid several times daily.

January 28th. Had a chill this morning followed by fever. At 5 p. m. her temperature is 99.2F, pulse 96.

Observe quite a number of erythematous patches on the left thigh especially on its outer surface. Most of them are quite small, others four or five inches in diameter. The skin surrounding the clusters on the buttock and posterior surface of thigh is intensely red and the erythema is diffused over a greater area than usually. The right buttock which has always been slightly erythematous is to-day very red, and the redness involves the upper part of the posterior surface of the right thigh. This erythematous condition of the gluteal regions and thighs increases markedly during a febrile attack or while she is menstruating. At such times small patches of erythema appear on the left leg.

Occasionally the vesicles "dry up" or cease to discharge for several days, and then they become very much distended and quite tender to the touch.

In all the cases cited in Crocker's work on skin diseases, the affection first manifested itself in early childhood and has always been localized. In this case the patient was 24 years of age when it began. It is highly probable that syphilis plays

an important factor in this case, perhaps by affecting the walls of the lymphatic vessels in a similar manner as it sometimes influences the arterial walls. By causing an obstruction in one portion of the lymph channels we must have a dilatation in another.

March 15th. The treatment has been inunctions of mercury until her gums were touched. Iodide of potash two and one-half grains three times daily. I endeavored to increase the dose of iodide, but she could not tolerate it. She has also been taking six grains of quinine daily. She is gradually improving. During the past three weeks there has been very little discharge of fluid, and a number of the peripheral vesicles have disappeared while the clusters are becoming more flattened. The vesicles on the anterior surface of the left thigh have entirely vanished.

ENCYSTED STONE COMPLICATED WITH GROWTHS OF THE
BLADDER.¹

BY

C. H. MASTIN, M.D., MOBILE, ALA.

WM. R.—, a barber by trade, aged 52 years, had been confined to bed for some two years, at the time I was called in consultation to visit him.

The history given me of his case was as follows: About five years ago, he first noticed trouble when passing his urine, and soon after had slight hemorrhage from the bladder. For the last four years he always passed a quantity of blood whenever he attempted to urinate, and for the last three years he had been unable to pass a drop of water save by the use of a catheter; during the last two years he had been confined to his room and most of the time to his bed. He gave me no history of having at any time had an attack of renal colic, although he had passed from the bladder in 1887 two small calculi.

During the past five years he had been under the care of several physicians, who had diagnosed his case one of prostatic enlargement, and little more had been done for him than to teach him how to introduce a soft catheter and evacuate his bladder.

At my first visit, early in May of 1890, I introduced a sound without difficulty, and at once detected the presence of a good

¹ Read at the Fifth Annual Meeting of the American Association of Andrology and Syphilology, September 23, 1891.

sized stone. There was no enlargement of the prostate, although there was a good deal of vesicle irritation, and the urine loaded with pus. Owing to the condition of the bladder, and the general condition of the patient, I advised a cystotomy in preference to the operation of litholopaxy, to which he at once assented, and I operated on the 6th of May, 1890.

By preference I selected the median method, and opened the perineum in the line of the raphe, as is usually done; passing my finger into the bladder it came at once in contact with a large sized stone. When the first gush of urine was passed, it was followed by about four ounces of thick creamy pus, taking hold of the stone with the forceps, it was found to be very soft, as it broke down under the slightest pressure. The bladder was then carefully washed of its débris, mucus, pus and fragments of stone, with a warm solution of boric acid, and then carefully explored with the sound and the finger. In this exploration I was not, at first, able to detect any remnants of the stone, but after introducing the sound again to be assured that the bladder was clear, I detected a rough spot on the left side of the bladder, situated about the point at which the ureter at that side enters the viscus. Introducing my finger again, I detected the rough side of a stone, which was encysted, and leaving a spot about the size of a ten cent coin uncovered. This spot corresponded with the entrance of the left ureter. I could trace distinctly the outline of the stone, and feel that it was so large, that its removal would be impossible unless by freely opening the mouth of the sac to enable me to turn it out with the scoop or extract it by the forceps. This being the only possible way by which the stone could be turned out of its bed, I determined to slit open the mouth of the sac, as the only way to reach it with the forceps. I appreciated the fact that I was acting against all surgical precedents, in thus cutting into the wall of the bladder, but no alternative remained—I must either slit the sac, or leave the stone—I decided upon the former. To effect this a long, narrow-bladed, probe-pointed knife was guided along my finger until the edge of the sac was entered, and a straight incision made to cross the diameter of the stone: after this was done, considerable difficulty was encountered in dislodging the stone, first with a lever and then with the forceps. Its chipped and broken surface shows the resistance which it offered before it was at last turned out of its bed. The bladder being carefully explored was now thoroughly washed with a hot borated solution, and a glass drain-

age tube left in the wound. He reacted well, and no further difficulty was met with.

Being compelled to leave the city on the next day, I placed the case in the care of Dr. C. H. Mastin, Jr., with instructions to keep the bladder well drained, and to wash it out each day with the boric solution.

All went on well until the night of the 11th, five days after the operation, when the doctor was sent for to see the patient, as the tube had escaped and the urine ceased to flow, pain being the consequence. Upon his arrival he found the tube had been pushed out, and the wound plugged with a mass of soft tissue, which at first he thought was a prolapse of the mucous membrane. Examining it carefully he discovered it was detached, and removed it by gentle traction, whereupon it was followed by a gush of urine, and the patient entirely relieved of the pain which he had been suffering for several hours.

The specimen in the vial is the growth (specimen shown): it was *very* much larger than it now appears, having shrunk from long emersion in alcohol used to preserve it. The patient made a good recovery, and his health was vastly improved, he being so well as to resume his usual avocation, when a year after he began to show signs of kidney trouble, and soon thereafter died from uræmic saturation.

The interesting facts in the case are, the stone encysted at the mouth of the ureter, where it probably had become entangled after the passage from the kidney along the duct in its way to the bladder. It is interesting to note that he had never suffered from an attack of renal colic. The large size of the specimen can only be accounted by the fact of the accretion which had taken place upon its surface, as the urine percolated through the duct and around the sac which contained it. The entire cortical portion of the stone was clipped off in the attempt to remove it, and the most of it washed away by the douche. A fragment of the cortex which is contained in the little box will, when added to the stone, give an idea as to the original size of the calculus.

The growth must speak for itself, for no section of it having been made, I am unable to explain. Most probably it was a pedunculated polypus, which hung from the anterior wall of the bladder in front of the internal meatus of the urethra, and, as a valve or trap door prevented the patient from passing his urine by falling forward and closing the meatus; when the catheter was introduced it could, of course, be easily pushed

aside, and no difficulty experienced in evacuating the bladder.

I confess I did not detect this growth at the time of the operation, when I made a most careful exploration of the bladder and its entire cavity. Being accustomed to pass my finger into the bladder, I cannot now comprehend how it was possible for so large a body as this to have escaped my touch and recognition. Nor can I account for the manner in which it lost its attachments several days after the operation, as I am very certain that it was not interfered with by the forceps at the time of the operation.

I present the specimens as unique, and because I am not aware of a similar case being on record.

A CASE OF LICHEN RUBER.¹

BY

JOSEPH GRINDON, PH.D., M.D.,

Clinical Professor of Diseases of the Skin, St. Louis Medical College.

THE case about to be detailed has been placed under the caption "Lichen Ruber" in the belief that so long as the schools of Vienna and Paris continue to disagree as to the identity of the "lichen ruber acuminatus" of Kaposi and the "pityriasis rubra pilaris" of Devergie, so long as such clinicians as Kaposi will hesitate to recognize the lichen planus of Wilson as a distinct pathological entity, so long as the terminology of the chronic papular dermatoses remains in the present unsatisfactory condition; when such a gathering as was witnessed in Paris two years ago, as well as that of last year at Berlin, failed, after mature deliberation in definitely establishing the constitution and limitation of the lichen group, so long will it be best to consider these terms as representing not fixed entities, but as convenient working names for provisional groups of uncertain definition, which, with the accumulation of fresh evidence, will be reduced to orderly arrangement, or perhaps, in some instances, abandoned.

It is not possible to-day to give such a clinical description of any of these types (except perhaps planus), as would please all. That which would be comprehensive enough to meet the

¹ Read before the American Dermatological Association, Fifteenth Annual Meeting.

demands of some would over-step the bounds insisted on by others. One may therefore be pardoned for classifying obscure, chronic, inflammatory, papular affections which will not readily fall under either of the other accepted titles, as lichen ruber; there to be allowed to remain until further notice.

A. S., an Englishman, now aged 66, has lived in this country since the age of eighteen. His family history is of the best, showing an unusual record of longevity and freedom from serious ailments. Patient himself is of fair physical development, although not robust, fair skin, blondish hair, but dark eyes, and is of a decided nervous temperament. During his early days lived a great deal out of doors, but for the last forty years or so has been an accountant, although always taking a sufficient share of exercise. Has never made use of tobacco, or alcohol, in any form, and has always limited himself to the plainest and most wholesome of fare, being in every respect a man of regular habits. Has never been exposed to hardships or privation: but for years he was constantly overworked at his desk, often prolonging his labors far into the night.

Until the beginning of his present trouble, his powers of endurance and health had been unusually good, the exceptions being—besides some of the affections incidental to childhood—an attack of malaria on first coming to St. Louis, nearly forty years ago; Sciatica (?) a few years later, from which he completely recovered; an alopecia areata thirty years ago, the hair on the affected parts having come out white, and so remained until now, the rest of the hair, even on the temples, not having commenced to turn although the beard and mustache are quite white; enteritis and two attacks of bronchitis in the last twenty-five years, and a slight asthmatic tendency of recent development, making the full list of his illnesses. A dandruff had also existed with the usual exacerbations and remissions for many years, but without producing any noticeable thinning of the hair. His hands were prone to the occurrence of fissures in cold weather.

Some twelve years ago, patient began to experience considerable pruritus about the bearded portions of the face and the scalp. This led to scratching, and to a habit of pulling out hairs, one at a time, which, he said, seemed to relieve the itching which was apparently of a definitely localized character. In this way, large patches, here and there, became denuded, which led him to shave clean, whereas he had, up to that time, worn a full beard.

This condition continued for some four years, when, in the Fall of 1884, patient called my attention to a discoid patch on the right cheek, consisting of closely crowded, but not confluent, dark red, firm papules, smooth, not scaly, pruritic, and which seemed to be adding to their number at the periphery. I shall not describe in detail every step in the process for the next four years, but will merely state that from that time the patch spread gradually, other patches and isolated lesions appearing about both cheeks, upper lip and nose, being attended with increasing pruritus and being in no way influenced by the measures, internal as well as external, which were used in hope of relief.

The affection, and more especially its attendant subjective symptoms, were markedly affected by the temperature, being better in warm weather and worse in cold.

In the Winter of 1888 the patient presented the following appearance: On the face were to be seen, covering each cheek, infiltrated patches, in which separate papules could still be distinguished. The eruption could hardly be described as being *en nappe*, as it rather presented here something of a nodular or hob-nailed appearance from the papules still preserving their roundish outline though crowded close together. The color of the patch varied from a bright to a dark red, according to the temperature. The surface was quite free from scales. The thickened skin was somewhat suggestive of oedema to the eye, but to the finger was quite leathery, hard and resistant, and, when examined in this way, revealed the fact that the infiltration extended to a considerable depth, the process being seated in, and apparently involving the entire thickness of the corium. The deepening of the sulci was so marked as to call for special mention. About the temples and scattered about the periphery of the above mentioned patches were numerous isolated papules. These averaged from a quarter to a third of a centimetre in diameter, having a circular outline, never polygonal, rising sharply from the surrounding skin, of a hemispheroidal shape, bright or dark red, or brownish, or in some instances nearly approximating the color of the skin, smooth and shining, but not with the peculiar sheen and glister as though from a thin sheet of some translucent opaline medium, so often seen in lichen planus. They presented no trace of a scale. In a few instances a (hair grew from the summit) although at no time could I satisfy myself of any constant relation existing between these lesions and the hair follicles. In only a few instances, and these about the face, could an exceedingly minute central pit be made out.

They were firm, most of them as hard as variola papules, and intensely pruritic. The patient was constantly tearing them, provoking quite free hemorrhage, so that a drop of blood would often conurse down the side of the face from a wounded papule. Others, the sites of older traumatisms, were capped with blood crusts, while at other points the lesions seemed to have been quite torn away, leaving a raw and excoriated base. The scalp was also the site of pruritus, which seemed to be localized within limited areas and led to the inflicting of nail-lesions and the scratching and pulling out of patches of hair. I could never make out any definite primary lesion here, with the exception of some scattered papules just within the hairy border over the forehead. These resembled those above described and never scaled or crusted.

On the anterior and outer aspect of each leg, but not disposed with exact symmetry, was a somewhat brownish red surface, covered with scanty, thin, papery scales in places, and at others free from them. No separate lesions could be made out, even at the edges of these patches, which were fairly well defined. They were infiltrated, intensely pruritic, and in every respect resembled and probably were, patches of squamous eczema, although neither here nor elsewhere was there ever at any time the slightest discharge or exudation, the eruption being absolutely dry throughout. About this time there began to be some generalized pruritus, best marked about the anterior aspects of the thighs and about the fore-arms.

During the ensuing Summer, the lesions about the face receded a little and the patient obtained a partial respite from the tormenting itching, but with the first approach of cold weather in the Fall of '89, all his symptoms reappeared with increased violence.

The patches on the cheeks now presented a somewhat different appearance, the papules having quite flattened out, but the involved area being thickened, of a harsh feel, although not scaly, and divided up into angular areas by the deepening of the natural sulci, this feature being more marked than ever. Similar but less thickened patches had developed by the coalescence of papules on the temples, and there was a broad patch on each side of the neck, extending posteriorly more than anteriorly. A number of new isolated lesions had appeared on the forehead, nose and upper lip, some of the latter close to the vermilion border. The lower lip and chin were quite free and so remained. The new papules attained an appreciably larger

size than those occurring earlier. There were some papules about the infra-maxillary region. The thickening of the skin of the face and exaggeration of its normal folds gave an appearance much resembling that of leprous leontiasis, which was heightened by the appearance of papules about the lobes of the ears.

Scattered over the entire body surface, but discretely, were a number of papules. The front and back of the thorax were about equally involved, but the extensor aspect of the arms rather more than the flexor. These papules were flatter than those on the face. The genitals were spared and there were but few lesions on the buttocks. The thighs presented many papules, and the legs were covered with a slightly scaly reddish-brown infiltrated sheet of disease, rough, but not nutmeg-grater like to the feel. There were a few lesions on the hands and feet, the palmar and plantar epithelium being dry and slightly thickened. Most of the finger and toe nails were thickened to many times their normal size, dry, brittle, broken in places, lustreless and dystrophic. The skin on the hands as well as the finger nails looked dirty on account of the general roughened and dystrophic condition, and the consequent almost impossibility of thoroughly removing the dirt, which seemed in places ingrained. The axillary, inguinal and other glands were greatly enlarged, of almost stony hardness, but not painful or tender on pressure. About the eyelids were various tubercles, covered with dark but otherwise normal skin, more or less firm, somewhat acuminate, of the size of a pea or larger, and without subjective symptoms.

The pruritus was ferocious, so that the unfortunate sufferer would lie awake nights tearing himself until exhaustion brought a brief respite. His general health, however, continued comparatively unaffected. During the day the patient remained in comparative comfort, but on disrobing at night the consequent chilling of the surface would awake the itching which would continue as above described, although not so severe after the bed clothes had become warmed by contact with the body.

Neither arsenic, nor antimony which was also tried, ever had any appreciable effect in controlling the disease. Bromides gave a little rest at night. Unna's carbolic-sublimate ointment was now used thoroughly and with persistence. The benefit accruing therefrom although gradual was unmistakable. Not only was the pruritus relieved but the lesions began to disappear. This was continued until Spring, by which time the patient's

condition was remarkably better, the oldest and most thickly crowded lesions, to-wit; those on the face, being less affected than those about the body.

The oncoming warm weather had brought about remission of symptoms, and during the ensuing Summer patient was better than he had been for years and hopes of an ultimate cure were entertained. Last Fall, however, with the cooler weather, he began to retrograde, although his condition did not become nearly as distressing as it had been the previous year. Early in October the patient met with a severe surgical injury which confined him to his bed for a month. What was my surprise to find that within a few days the disease began to fade away and disappear. In three weeks there was hardly a trace of it left. During this time and for the preceding six months the patient had received no treatment whatever. For about two months he remained perfectly free from all skin lesions, the nails nearly regaining the normal. Gradually, however, the disease began to return, and on August 1, 1891, there were to be seen a few scattered lesions about the face, arms and legs, all very pruritic. The sites on the cheeks formerly occupied by thickened patches had taken on a different look, being tumefied but not divided up into polygonal spaces, and of a lighter red.

Believing that the study of the dermatoses composing the lichen group is still far from complete, I have essayed to set down with care the details in this case, as well as because of its presenting features in many respects differing from what has hitherto been recorded in this country.

Dr. Taylor's paper in the *New York Medical Journal* for January 5, 1889, being the American classic on this subject has been the object of my careful study. Perhaps some of the peculiarities of my case will be best brought out by setting them side by side with details taken from his description.

The disease began with the appearance of papules which were not "conical" but rounded, and soon became more markedly so, taking on what the Doctor has so well called a "beehive shape." They finally but not "soon" became flattened out and were lost in a general thickening of the integument, not "mainly of the epidermis" but seated, as in Haus Von Hebra's cases, chiefly or altogether in the cutis. What follows in the note from which the quotations are made (p. 4 of Dr. Taylor's article) in regard to the deep corrugation, thickness, harshness and loss of elasticity of the skin would tally closely

with the facts observed by me. As the parts most involved were not "submitted to much movement and stretching," there was no "production of deep fissures."

Although the case has existed so long it never passed into a distinctly scaling condition.

I shall sum up the description of this case so that a connected idea may be formed of those points in which it agrees with, and those in which it differs from hitherto published descriptions:

An essentially chronic disease, showing occasional exacerbations and remissions, with one short intervening period of apparent cure, attended with no marked emaciation, or depreciation of the bodily health beyond that directly traceable to pruritus and its attendant insomnia, occurring in an individual who had already had a neurotrophic dermatosis; its lesions passing through a very gradual process of evolution and finally merging into a condition of general thickening and infiltration.

"Symmetrical in its distribution, spreading from the upper parts of the body downwards." (Taylor.) Remaining for a long time localized on the face and finally spreading uniformly but discreetly over the whole body, and again receding.

The lesions seem to develop from the cutis and not from the corneous layer. They consist of firm red papules having a quite smooth surface and all the appearances of an inflammatory new growth, and only after very slow and gradual changes showing a slight tendency to desquamation. They are rounded in outline and profile, with, in a few instances, a very minute central pit.

Their relation to the hair follicles is somewhat problematic, but certain it is that the nutrition of the pilous system in affected regions is very markedly impaired.

In color they show considerable variation which depends chiefly on atmospheric temperature. Aside from this factor, however, the color varies from one differing only a few shades from that of the normal skin, to bright red, on the one hand, and dark red, or coppery, on the other.

The resulting pigmentation is light brownish and blotchy about the face and yellowish on the body when present.

The full sized lesions, from one-fourth to one-third of a centimeter in diameter, coalesce in places about the face and neck into patches marked by thickening and great deepening of the natural furrows of the skin, but nothing like the irregular, wooden, warty patches sometimes seen in lichen planus upon the extremities.

In old patches the nodular appearance from coalescence of lesions passes into one in which separate lesions can no longer be made out, and of uniformly deepened color.

The palms and soles become dry and covered with a thickened epidermis. Nails much thickened, distorted and brittle. Mucous membranes unaffected.

It will be seen that this case resembles those of Dr. Taylor's in its remissions and tendency to recovery, and differs from the cases observed by Hans von Hebra, who says that such a thing as a spontaneous disappearance of lichen ruber is unknown.¹

If it were not for a disinclination to use a complex terminology which will probably prove to be merely provisional, the designation *lichen ruber obtusus* might well be chosen as descriptive of this case. At no time, not even in the earliest stages, were the lesions acuminate.

It will be noted that this case presents some points of similarity to lichen planus. Some of the points in which it differs are:

Absence of polygonal outline and of central depression of lesions. Absence of micaceous glister.

Distribution (*face*, general body surface, symmetrically; extremities implicated *late* and *sparingly*) and arrangement. (Never linear.)

Involvement of pilous system and *nails*.

REPORT OF AN UNUSUAL CASE OF HEREDITARY SYPHILIS.

BY

JOHN V. SHOEMAKER, A.M., M.D.,

PHILADELPHIA.

J. B., aged 27, male, is said to have been well formed and healthy at birth. During childhood and early boyhood he was free from disease with the exception of attacks of the eruptive fevers incidental to that period of life. The malady from which he has suffered ever since began at the age of fourteen in the form of tubercles upon the face and neck. The lesions sluggishly enlarged, softened and eventually burst, establishing large ulcers, involving the greater part of the face. The first manifestation developed in front of the right ear, was soon followed by similar tubercles upon the right and left sides of the cheek, in the right infra-maxillary region, over the

¹ *Monatsh. f. Prakt. Derm.* 1890, 3.

upper portion of the trachea, upon the upper lip and nose. Coincident with this eruption ulcers made their appearance in the throat, and he suffered at times from dysphagia. His voice likewise became affected and from that time onward he has frequently been subject to aphonia. Soon after the beginning of these symptoms his eyes, especially the right, became sore and the tear-ducts occluded. About three years later he experienced for several months acute pain over the frontal sinus. The agony was so sharp that his sleep was much broken and it rendered him so emotional, excited and desperate that his relatives feared he might be driven to suicide. Finally a mass of necrotic tissue, grayish in color and very offensive to the smell was discharged and the pain abated.



FIG. 1.

The patient first came under my care about twelve years ago, while the lesions were in the ulcerative stage, well depicted in the accompanying illustration. (See Fig. 1.) The appearance of these ulcers was striking and peculiar. Their surface was covered with very prominent and exuberant granulations, presenting a fungoid aspect like that of a cauliflower. Most of the face was covered with these unsightly sores. A crescent-shaped ulcer extended symmetrically on each side from just above the angle of the mouth downward to the chin, while the upper lip was surmounted by a similar excrescence running out on each side of the middle line and almost coalescing with those at the side of the mouth. The entire tip of the nose was converted into a protuberant fungoid mass, the seat of abundant suppura-

tion. The appearance of the other lesions, whose situation I have indicated, was substantially identical. The buccal mucous membrane was ulcerated in various places. There was no peculiarity of the central upper incisors. He was decidedly hard of hearing, the imperfection being referred by his mother to an attack of scarlet fever from which, some years previously, he had suffered.

From the character of the lesions, together with the personal and family history, I had no difficulty in arriving at the diagnosis of inherited syphilis. The only disease capable of producing similar manifestations is lupus vulgaris. Neither the aspect nor the mode of evolution of the lupus nodule bears much resemblance to the syphilitic tubercle, but when confronted with the case I was called upon to distinguish between the two specific infections, either of which might be the cause of the destructive action. In lupus the surface of the ulcer may become studded with papillary outgrowths or even, as in certain cases first described by McCall Anderson under the name of lupus verrucosus, warty excrescences may form. In the latter variety, however, there is no ulceration but simply hypertrophied papillae belonging to the corium. In the case which I am describing the skin was distinctly ulcerated and the fungoid growth was due to granuloma-tissue. The appearance of the disease bore more analogy to that reported by Morrow, and designated tuberculosis papillomatosa cutis. In the latter affection, however, as in Anderson's cases, the lesion developed as a papilloma without pre-existing ulceration. In favor of syphilis, moreover, was the number of separate lesions, the rapidity of their action, the co-existence of ulcers in the mouth, and the involvement of the eye and voice. The lesions, characteristic of late syphilis, could hardly be regarded as acquired by so young a lad in the ordinary way while no symptoms in the history pointed to comparatively recent accidental infection. Neither could any information be obtained which would lead me to suppose that the disease had been acquired during infancy or early childhood. I was, however, told that the father, who had been a soldier during the Civil War, had suffered from large and unhealthy sores. The parent I have never seen, and he is at present an inmate of a Soldiers' Home in a distant town. I have been informed by a physician who had known the father that he was undoubtedly a victim of syphilis. Again, a sister of the patient, five years older, also bears scars upon her face, has nasal catarrh and frequently loses her voice for a week at a time. Younger

children of the same family have no eruptions upon the skin but suffer from imperfect hearing, or other more obscure evidences of constitutional contamination. The case is doubtless syphilitic and, I believe, transmitted from the father. Whether the disease can be strictly regarded as one of tardy development I am less certain. It is well known that the mortality of hereditary syphilis is excessive, and that at least one-third of all infected embryos perish in utero either by the direct influence of the virus or from syphilitic disease of the placenta or umbilical vessels. The more recent and active the disease in the parent the more fatal is the result to the child. The earlier the ovum is infected the sooner, as a rule, will it be expelled from the womb. The pregnancy may, however, continue to full term and the child be still-born. If living at birth its body may already be covered with a syphilitic eruption. Usually, however, the child is apparently healthy at first but evidences of hereditary disease present themselves within a short time. Manifestations of syphilitic inheritance occur almost uniformly in from two to twelve weeks after birth. Of syphilitic children born alive more than one-third die within the first six months. A few cases have been met with which seem to indicate that the disease may, under certain circumstances, be transmitted to the third generation.

I need not enter into much detail in this paper concerning the symptoms of hereditary syphilis in young infants, since they are unfortunately too familiar. Evidences of cachexia appear in the loose, dry and wrinkled skin of a dull yellow color, in the dry and scanty hair, the brittle, stunted or distorted nails. The face is withered and anxious and has been likened to that of a little old man or woman. The voice is hoarse and the presence of a syphilitic rhinitis causes what is termed "the snuffles" by obstruction to the respiration. The eruption is of a very diversified character and although it presents the characteristic hue of syphilis it is peculiar in the fact that lesions rare in acquired syphilis and occurring in the late stages of its course may be seen from the beginning in the hereditary form of the disease. Thus, in addition to erythema, papules and mucous patches, tubercles and bullæ are common. Conjunctivitis, keratitis and otitis may likewise occur, and disease of the teeth, bones, viscera and nervous system are of no unusual occurrence.

If by means of appropriate treatment, early instituted and long continued, we are happily enabled to preserve life, the child

generally remains subject for many years to outbreaks of more or less modified forms of the malady. In a few cases syphilis seems to remain latent for many years after birth, no symptoms being manifested in the interval. Again, if certain symptoms appear in the meantime they are mild in degree and of doubtful significance.

The case which forms the basis of this paper would seem to exemplify such a tardy development.

The present subject likewise graphically illustrates several other important facts, viz., the rapid progress of the lesions, the irreparable damage which they may occasion and, consequently, the exceeding importance of an early diagnosis. It shows, too, an almost inconceivable heedlessness or ignorance, capable of allowing such loathsome ulcers to work havoc upon the face of a youth before seeking competent advice. The poor fellow is naturally of a predisposing appearance. His scarred and disfigured countenance is now a subject of deep mortification to him especially as he has been, according to his opportunities, an industrious person and is free from the usual bad habits of his age and class.

At his first visit the lad was placed upon the one twenty-fourth of a grain of corrosive chloride of mercury, with five grains of iodide of potassium, three times a day in syrup and water. As he was somewhat debilitated the tincture of chloride of iron was given separately, in daily doses of thirty drops. It is often of benefit to administer iron in addition to the anti-syphilitic mixture, and in the course of the prolonged treatment required, to occasionally suspend the mercurial and replace it by tonic drugs, such as quinine, strychnine, the phosphates or hypophosphites, erythroxyton coca or perhaps even cod liver oil. It is not infrequently advisable to prescribe an occasional laxative in order to keep the secretions active, and bitters or the digestive ferments are sometimes of use.

The local treatment adopted in the first instance consisted of an ointment containing a half drachm of oleate of arsenic, six grains of crystallized carbolic acid and a half drachm of powdered arrow-root to the ounce of benzoated lard. Under this combination the character of the lesions rapidly changed. The exuberant granulations were destroyed, a plane surface was obtained in which the work of repair soon began. The general condition of the patient visibly improved.

At this period, when the manifestations of the disease were in a fair way to be speedily healed with as little cicatricial dis-

figurement as was possible the patient was withdrawn from professional supervision. An interval of twelve years then elapsed during which I neither saw nor heard of the case. During this time the youth was deluged with quack nostrums taken at the suggestion of any chance volunteer adviser. About three months ago he again placed himself under my care. Upon inspection I found that healthy cicatrices occupied the sites of all the ulcers except that upon the tip of the nose. Each side of that organ was occupied by a scar beginning at the bridge and running off obliquely towards the ala. The integument covering the cartilaginous septum was very red and at the extreme point of the nose was situated an ulcer. The young man could give no history of the discharge of necrosed bone and the nasal bones appeared intact since the contour of the feature was not impaired. At some period, however, perforation of the cartilaginous septum had occurred. A course of specific treatment of which the syrup of hydriodic acid formed a part was given and again the remaining trace of the disease responded favorably to treatment. The deep redness of the surrounding surface has faded in a marked degree and the ulcer has almost entirely healed.

Nine years ago an arthropathy developed in the right hip and afterward involved the knee of the same side. From the account which he gives it was not violent enough to confine him to bed, and this manifestation, like the others, was neglected with the utmost indifference. The consequence is a considerable atrophy of the right lower limb which is both shortened and diminished in circumference. The patient is obliged to have an extra thick sole and heel placed upon his right shoe and even with this artifice he limps in his walk. Motion of both joints is impeded though not destroyed. Flexion and extension are possible but are circumscribed in degree.

Notwithstanding so severe, destructive and chronic a process, as related, the man presents at this time a very fair appearance. (See Fig. 2.) He is of good size, weight and strength. His appetite is good, and he only complains of having a "sour stomach" in the morning. His voice is still apt at times to be husky. There is no sign of ulceration of the cornea.

Cauliflower excrescences, though so marked a feature of the present case, are not pathognomonic of any one disease-process. A number of causes and conditions which determine a flux of blood toward the papillary layer of the corium occasion proliferation of the papillae which sprout above

the surface to form what are often called vegetations. Thus we have the common venereal wart, the condyloma, the papillomatous form of lupus or tuberculosis of the skin and the outgrowths which accompany elephantiasis. Pempligus vegetans is also occasionally observed. The syphilitic papule, tubercle or gumma may likewise be transformed into a vegetating lesion. With the exception of the condyloma, however, which occurs in the vicinity of the muco-cutaneous outlets, vegetating syphilides are not common either in the acquired or



FIG. 2.

hereditary disease. A wart-like projection of granulation tissue is much more apt to occur in late than in early syphilis, and this fact affords another instance of the concurrence in the hereditary affection of lesions characteristic of different stages. The raspberry or cauliflower development of ulcerated tubercles is apt to appear upon the hairy scalp. A remarkable case was observed and described in 1876 by Dr. De Amicis, of Naples. The vegetation resulted from the transformation of macules of the forehead which had appeared three months previously, spread from the forehead to the occiput and, on the sides, to each temporo-parietal region. The vegetating masses were strikingly suggestive of the raspberry or strawberry. "Their hue was a pale red

and they were covered with a stratum of viscid, puriform mucus, which was more abundant in the interspaces separating the vegetating masses." Cases of this kind have probably often been confounded with frambæsia or yaws in countries where the latter disease is liable to occur.

The therapeutic results in the case under consideration have been surprisingly good in view of the late period at which it was instituted. In the years during which the patient escaped observation he was without intelligent treatment and the only benefit which he inadvertently obtained was due to the iodide of potassium and vegetable alteratives which his quack medicines may have contained. We are accustomed to think, and with justice, that the matter of cardinal importance in such a case is the determination of a correct diagnosis. When we have ascertained the nature of the infection the proper treatment is indicated almost with the certainty of an axiom. Though this confidence is founded upon the gratifying success which attends our management of the large majority of cases, yet we must beware of falling into a mere routine. If our thoughts are limited to a mercurial or mixed plan of treatment we shall, from time to time, suffer severe disappointment in the action of our remedies. The profound and peculiar impress which syphilis stamps upon the processes of nutrition must be combated by every accessory means at our command. The habits of the patient must be regulated to a nicety, the action of the skin must be promoted by the most scrupulous cleanliness, secretion and elimination must be encouraged and tonics, especially iron, must be occasionally administered. These points have dwelt upon in other publications and can but outline them in this paper. I feel assured, however, that these subsidiary agencies are of value in every case of syphilis while in not a few they rise at times to paramount importance. Again, as regards specific medication, a resort to other methods of introducing the remedy, as, for instance, by inunction or hypodermic injection, if the patient be old enough to bear the latter method, will be rewarded by a shorter course of treatment. The patient whose case I have described was of sufficient age to warrant the employment of hypodermic medication. Indeed, Moncorvo, of Rio de Janeiro, has lately been making use of this mode in much younger children with satisfactory results.

Society Transactions.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY, THURSDAY EVENING, MARCH 10TH,
1892.

DR. E. L. KEYES, *President, in the Chair.*

A Case of Congenital Hypospadias.—DR. PHELPS presented a young man who came to him with a very severe form of congenital deformity of the penis. The organ was doubled upon itself, and firmly attached to the scrotum. Four operations had been performed. In the first one, done under cocaine, Dr. Phelps simply relieved the penis from its scrotal attachment: in the second operation the entire organ was liberated, and the cicatricial tissue dissected out. The two subsequent operations were performed for the purpose of lengthening the penis and completing the floor of the urethra. In his operation, Dr. Phelps employed a modification of the plan devised by Anger. A curved incision was made anteriorly, so as to avoid urethral constriction, the idea being taken from the hair-lip operation. A modification was also made in the arrangement and stitching of the flaps, so as to avoid the formation of cicatricial tissue underneath them.

DR. ALEXANDER said the secret of success in these operations was to overcome the difficulty in regard to straightening the penis.

DR. KEYES stated that he had operated four times for the relief of this condition. Three of them were hospital cases and were lost sight of. In the fourth case the man got a perfectly straight penis and was going to have a further operation done to relieve the constriction of the urethra, but he was married in the meantime and decided that he could get on very well with his penis as it was. In some cases, Dr. Keyes said, no amount of cutting would perfectly straighten out the organ.

Digital Chancre.—DR. F. T. BROWN presented a case of syphilis, the initial lesion of which had occurred on the ring finger of the right hand. The patient—a young man—had come to the assistance of a stranger who was engaged in a fight during the early part of last October, and was badly worsted, having his finger bitten and a tooth knocked out. His finger at first gave him very little trouble, but at the end of three or four weeks it became quite tender. The patient has never exposed himself to the ordinary mode of infection. He presents unmistakable signs of syphilis. One point of interest in the case is that while the glandular enlargement is well marked all through the body, there is no enlargement of the epitrochlear glands on that particular side. This peculiarity is mentioned in an article read by Dr. Taylor, in 1890, in which he speaks of that particular form of chancre, and states that the epitrochlear glands may escape enlargement. The axillary glands are very much enlarged.

DR. KEYES stated that this omission of the epitrochlear glands to become enlarged is not very unusual. Why it is so he has never seen explained.

DR. GOLDENBERG stated that he had seen one case of digital chancre

at the New York Hospital and one in Berlin in which the epitrochlear glands did not become enlarged. Prof. Lewin, of Berlin, explained this omission by the anatomical relation of the lymphatic vessels, stating that the superficial lymphatics do not connect with the cubital glands, but with those in the axilla. The cubital glands lie much deeper.

DR. KEYES stated that he did not consider this explanation satisfactory. The epitrochlear glands often do not escape enlargement: when they do, the axillary glands are usually intensely enlarged.

DR. TAYLOR said that in his paper referred to by Dr. Brown, he spoke of one case—a physician—who had epitrochlear glands as large as a hazel nut in each arm.

DR. J. E. KELLY read a very interesting and exhaustive paper on the surgical anatomy of the structures lying about the bladder, and their significance in connection with the operations of perineal and supra-pubic cystotomy.

DR. C. W. ALLEN stated that he desired to thank Dr. Kelly for his very valuable paper. The subject presented was an interesting one and handled in a thorough and masterly manner.

Pus in the Urine—How to Discover its Source?—DR. KEYES, in opening the discussion, stated that in the selection of this subject, as well as those to be discussed at subsequent meetings of the Section during the present year, he had endeavored to confine himself to questions of practical importance. These could be discussed in a general way. He would assume, in these general discussions, that no knowledge of the cystoscope or the endoscope was necessary, and only a very slight knowledge of microscopy. It is a fact that a great many physicians are not at all acquainted with what pus is. Pus is not the healthy mucus eland that always collects in the urine; it is not an excess of that mucus, it is not bacteria; it is not phosphates. Pus in the urine is in the form of a granular deposit, dirty white or pinkish in color, or it may have a stringy appearance which is called by some stringy mucus. There is no such thing as stringy mucus. The stringy form of pus indicates that some portion of the genito-urinary tract is in a condition of abrasion or ulceration, and that there is decomposition of urine, and with the pus mucus is present. It means catarrh of some portion of the genito-urinary tract. These shreds that occur in the urine are practically of three kinds: the linear, the tad-pole shred, and the fleecy, cotton-like shred. The linear shred, as a rule, may be presumed to come from the anterior urethra. The origin of the tad-pole shreds is limited to no particular area; they may come from a little follicular abscess or from a granular or excoriated spot in the membranous urethra. The fleecy, cotton-like shred is generally from the prostatic sinus; if spermatozoa are present, it is more than presumptive evidence. When the pus exudes from the meatus, it is almost conclusive evidence that the trouble lies anterior to the bulbo-membrane junction, although occasionally its source is posterior to that, especially if there has been sexual excitement. In spermatorrhea and posterior urethritis a little comes out at the meatus, but a free flow of pus usually indicates that the anterior urethra is in trouble. If the question is in doubt, you can clear it up by irrigating the anterior urethra with a solution of salicylic acid,—as recommended by Dr. Bryson for cleaning the bladder—and then putting in an ordinary bulbous sound, as big as will go, down to the junction, and leaving

it there for thirty seconds or a minute. On withdrawing the sound, if the pus has come from the anterior urethra, there will be on the shoulder of the bulb of your instrument a little soft scab, perhaps tinged with blood. In posterior urethral pus, there is no better expedient than first washing out the anterior urethra, and then making your patient urinate in two parts. Practically, the pus will be found in the first specimen, while the rest will be reasonably clear. If you suspect that the pus originates in a prostatic abscess or the seminal vesicles, you may be able to settle this by making your patient pass his water in three parts : first let him pass about one-third ; then put your finger into his rectum and press upon the seminal vesicle or the prostatic abscess, if you can appreciate it ; by milking the focus of suppuration in this way you will find the discharge of pus in the second flow of urine. The third flow will be comparatively clear.

The great trouble is to distinguish between bladder pus and kidney pus. The characteristics of the two, however, are very different. If the pus has its source in the kidney, it is not flocculent ; it is cheesy and heavy, and does not float around like the pus from the bladder. It settles down to the bottom of the vessel. Bladder pus, on the other hand, is stringy in appearance. Urine containing bladder pus will quickly decompose ; when passed it is frequently ammoniacal or neutral. In pyelitis the pus will often come in urine that is over-acid, and it will remain clear and acid perhaps for a week. When blood and pus are both present in the urine, the blood will usually fall later than the pus, and will remain as a little thin layer on top of it. Another distinguishing consideration is that the amount of albumen in urine is relatively greater when the pus present comes from the kidneys than it is when it comes from the bladder. If the amount of albumen is relatively high, then the probabilities are that the pus comes from the kidneys. However, if you have an ulcerated surface in the bladder, caused by cancer or stone, then you may get a considerable amount of albumen with the pus, but under ordinary circumstances the above statement holds good. If the urine contains a lot of granular pus, with perhaps one-half per cent. of albumen (by weight) you may be almost certain that you have a case of pyelitis. Another exceedingly good way to differentiate these two conditions is by washing the bladder. You first have your patient pass his water in two parts, each of which is opaque. Then pass a soft catheter into the bladder ; if you find that he was not able to empty his bladder completely, it is presumptive evidence of cystitis. Through the catheter wash the bladder with a salicylic acid solution until it is perfectly clean. Let the patient rest for an hour and then urinate : if the urine is still very cloudy, then it is probable that the pus comes from the kidney.

DR. HEITZMAN did not consider the tests spoken of by Dr. Keyes as sufficiently exact. Ofttimes, a combination of diseases exists ; for instance, an enlarged prostate combined with a pyelitis. The speaker thought that the only way to make a diagnosis in these cases was with the aid of the microscope.

DR. OTIS stated that he placed considerable importance on the amount of albumen found in connection with the pus. Where true pus is present, you always find a certain amount of albumen. That is one of the diagnostic points as to whether the pus comes from the bladder or the kidney. Whenever you have pus from the kidney, there is always a certain amount of

nephritis going on in that kidney and a certain amount of albumen. There are other chances of error; one of them that has not been spoken of and is rarely mentioned is the sympathetic albuminuria that accompanies inflammation of the prostate or about the trigonum.

DR. BROWN inquired, with reference to the last point brought out by Dr. Otis, the sympathetic albuminuria, whether the supply of albumen comes from the inflamed part, or whether it is really a sympathetic albuminuria, the supply of albumen coming from the kidney?

DR. OTIS replied that the albumen comes directly from the kidney and is probably due to a certain amount of inflammatory obstruction at the ureteral orifice. This has been demonstrated by experiments on animals.

DR. ALEXANDER stated that he thought no definite rule could be laid down with reference to the relative amounts of pus and albumen present in cystitis. In the earlier stages of cystitis, the amount of albumen is very small, but it will gradually increase, owing to the disappearance of the protective epithelium of the bladder. Another point to which Dr. Alexander called attention was that in examining for posterior urethritis, the morning specimen of urine should be selected, because during the day the water is passed so frequently, on account of the urgency that exists, that sufficient pus may not flow back into the bladder to cloud the urine.

DR. TAYLOR referred to the co-existence of polyuria with pyelitis.

DR. ALEXANDER said the question of polyuria may be very misleading in cases of tuberculosis of the bladder in the early stages. You have there polyuria with perhaps very little pus in the urine.

DR. BREWER inquired whether you could differentiate between bladder and kidney pus by the specific gravity of the urine? Also, whether kidney cells are always present in the latter case?

DR. KEYES replied that he did not think the specific gravity could be depended upon in making the differential diagnosis. As to the kidney cells, he thought they could always be found in pus from the kidney. They may be mistaken for cells from the neck of the bladder.

DR. FORDYCE referred to one point of technique in the use of the microscope. Instead of using a high power lens, he uses a low power lens with a high ocular, and in this way gets a broad field. Casts and urinary sediment which otherwise might escape observation may frequently be seen by distributing the urine uniformly over a glass slide without cover glass. In this way a much larger surface is obtained for a preliminary examination.

NEW YORK ACADEMY OF MEDICINE.

At a stated meeting of the New York Academy of Medicine, held on Thursday evening, April 7th, the papers read were presented by members of the Section on Genito-Urinary Surgery.

Some Results of Withdrawal, was the title of a paper read by DR. L. BOLTON BANGS.

The writer stated that while the effects caused by the continued practice of this form of conjugal onanism vary according to the susceptibility of the individual and the frequency of the exciting cause, they are certain to be felt sooner or later. It induces a prolongation of the sexual act, the men who practice this form of intercourse have a continual hankering after coition. The natural physiological congestion of the parts is not relieved;

this causes a chronic hyperemia followed by dilated blood vessels and changes in nutrition.

An Efficient Means of Controlling Hemorrhage after Supra-pubic Prostatectomy.—Read by DR. E. L. KEYES.

The writer said that the various means that have been employed in checking hemorrhage in operations upon the prostate are all more or less inadequate. For the purpose of controlling it more thoroughly Dr. Keyes recommends a pad made of bi-chloride gauze; there are four outer layers of gauze, six inches square, and six inner layers four inches square. These are fastened together through the centre by means of a strong silk thread, one end of which is attached to a small white shirt button, and the other end is drawn through the urethra by the aid of a catheter and with this the pad is tightly drawn down into the cavity left by the removal of the prostate. Another silk thread is attached to the pad by which it can be drawn out through the supra-pubic opening after the hemorrhage is controlled.

A Peculiar Case of Renal Hemorrhage: Passage of Blood Cast of Pelvis and Calices of Kidney, Cured by Nephrotomy, with some Observations upon the Value of Cystoscopy in the Diagnosis of Renal Disease.—By DR. SAMUEL ALEXANDER.

In his paper Dr. Alexander gave the history of an interesting case upon which he had operated for renal hemorrhage which, at the time of the operation had lasted nine months. The kidney was cut down upon but no hardness could be detected. About twenty exploratory punctures with the needle were then made, but no stone was found. Since the operation the man's condition has greatly improved. The interesting points in connection with the case were: 1. The remittent character of the hemorrhage. 2. The passage of fibrous casts. 3. The failure to find stone. 4. The cessation of hemorrhage after the operation.

NEW YORK DERMATOLOGICAL SOCIETY.

213TH REGULAR MEETING.

DR. GEORGE H. FOX, *President, in the Chair.*

Bacillus Lepræ.¹ DR. BYRON (by invitation) read a paper with this title.

DR. MORROW was surprised to know that true cultures of the lepra bacilli had been made as long ago as 1887. So far as he knew no one had been able to successfully repeat the original experiments. He believed that the attempts which members of the Leprosy Investigating Committee had made to produce true cultures had not been successful. A number of cultures had been made by them and submitted to Dr. Fraenkel, of Berlin, but were found by him not to respond to the tests for lepra bacilli. It is unfortunate that animals cannot be inoculated with certainty, and absolute demonstrations of the cultures made, as in the case of tubercle bacilli.

DR. ELLIOT stated that in the most recent literature on the subject, it was remarked that no pure cultures of lepra bacilli had been made.

DR. BYRON in closing said in bacteriology it was well known that many claims were made which were not well confirmed.

¹ Will be published.

It was difficult for anyone to make cultures directly from the tissues and in the majority of laboratories scarcely anyone attempted it.

When the bacillus of tuberculosis was discovered there were many criticisms upon it; it would not produce tuberculosis; it would not grow except upon sterilized blood serum. To-day it grows upon almost every culture medium.

The cultivation of the bacilli of leprosy is a matter of exceeding difficulty, in that it grows very slowly. A culture of tubercle bacilli is in as advanced a growth at the end of four weeks as one of lepra bacilli after more than two months' growth.

In cultures the lepra bacilli present all the characteristics of the bacilli in tissues, together with their reaction to staining fluids. Moreover they are the exact counterparts of those made by Bordoni-Uffreduzzi.

The cause of the failure of other investigators, he believes, depends upon the culture media used.

DR. MORROW said that he did not desire to cast any discredit upon Dr. Byron's work. His statement was rather one of surprise, that gentlemen who had recently been working in this field had not accepted the results obtained by Bordoni-Uffreduzzi.

Lambrecht's Patent Hygrometer.—Presented by DR. PIFFARD.

This was an instrument to determine the perspiratory functional activity of the skin. It could be obtained from Gall & Lembke of this city.

Compound Stearates.—DR. PIFFARD showed a number of the preparations made by McKesson & Robbins, in which stearic acid instead of oleic acid was combined with zinc, mercury, etc.

He also presented a twenty-five volume solution of peroxide of hydrogen in collodion, and a fifty per cent. solution in ether, made by McKesson & Robbins, the latter solution being a strong caustic.

DR. PIFFARD finally presented a new drawing device in connection with the microscope to take the place of the camera lucida.

214TH REGULAR MEETING.

DR. GEORGE H. FOX, *President, in the Chair.*

Lupus Erythematosus of the Hands.—Presented by DR. GEORGE THOMAS JACKSON.

The patient is a girl, sixteen years of age. The disease had lasted six months when it first came under observation about one month ago. The first lesion of lupus erythematosus was a red spot on the tip of the nose from which it spread over the whole end of the nose. About a month or six weeks after coming on the nose, it appeared on both hands, and shortly after upon the right ear. These parts are still affected, as well as a small spot on the right cheek. The edge of the right ear is shrunk and atrophied by the lupus. There is nothing unusual about the appearance of the disease upon the face. Upon the hands we find a "chilblain" appearance of the fingers just above the nails, they seeming to be a little swollen and dusky red. Upon the inner edge of both hands we find well marked purplish red, round patches, with raised borders and sunken centers, covered with thin, adherent scales. There is a similar patch upon the index finger of the right hand. Without the lesions upon the face a diagnosis of lupus ery-

thematosus could be made by the appearances of the circular patches on the hands.

DR. KLOTZ had obtained good results in the treatment of this affection by superficial cauterization with the Paquelin cautery, as recommended by Lassar, and a ten per cent. salicylated soap plaster.

DR. ELLIOT could corroborate what Dr. Klotz had said regarding the benefit to be derived from the Paquelin cautery. He had also obtained good results from a ten to fifteen per cent. ointment of β naphthol, but still better effects from naphthol plaster. In cases more or less acute in character, Thompson's solution of phosphorus internally had at times acted well.

DR. BRONSON said that the disease was so erratic in its course that it was difficult to reach any conclusion regarding the benefit to be derived from remedies.

He had found mercurial plaster a satisfactory remedy in some cases, in others the application of pure carbolic acid had been followed by a cure. There was certainly no specific for the disease.

DR. ALLEN had used pyrogallie acid followed by mercurial plaster; the results, however, were not always good.

DR. BULKLEY wished to emphasize what Dr. Elliot had said regarding the internal use of phosphorus in this disease. He had used Thompson's solution of the drug for over ten years and was positive of the results obtained. It was necessary to use a freshly prepared solution and to increase the dose to the point of tolerance. He had given as much as forty drops three times a day. The administration of the drug should be interrupted from time to time, and nitric acid given during the intervals. He considered phosphorus in this disease more of a specific than almost anything in dermatology.

DR. FOX had seen cases of lupus erythematosus improve under the use of phosphorus, while others became worse. He had tried almost all of the local remedies with good results and again with total failure. Cases are met with in which the local use of carbolic acid aggravates the eruption. The congestion of the skin must first be lessened by internal treatment.

DR. PIFFARD remarked that he had written on the use of this drug in lupus erythematosus in 1877. He considered it a very unsafe drug to use as solutions of it were unstable. Dr. E. R. Squibb had attempted to prepare a stable solution by dissolving the phosphorus in cod liver oil and this was probably the best preparation.

There was no question regarding its efficacy in the affection under discussion and in psoriasis, but he was afraid to use it.

Erythrodermia.—Presented by DR. ELLIOT.

DR. ELLIOT would present the case under that name for the reason that its obscurity prevented as yet its being placed in a definite category. The patient, male, age 54, stated that the disease had existed three years, gradually becoming severer. It now occupies the entire surface, which is reddened, slightly scaly and the skin is thickened a little apparently from an exudative process. There are no papules, vesicles or other objective manifestations. He complains more especially of intense pruritus. In addition to the symptoms mentioned the lymphatic glands of the inguinal regions, the cubital, axillary, pectoral, and cervical are all more or less enlarged, near Poupart's ligaments forming large prominent bunches. Except

constipation, his general health is fair, there is no anæmia and he is physically well preserved for his age.

(Since presenting the case, there has been an increase in the clinical symptoms, they have become severe. Besides, a soft, elastic tumor the size of a pigeon's egg has developed immediately under the right nipple. The lymphatic glands are larger.)

DR. ALLEN said the case suggested to him a lymphatic engorgement of the skin.

DR. JACKSON said it looked like a case of pityriasis rubra.

DR. BRONSON thought the lymphatics were at fault and that the vascularity of the skin was secondary.

He was inclined to consider it a case of beginning leucæmia cutis.

DR. KLOTZ said the case had many features of pityriasis rubra.

DR. SHERWELL had never seen a case of pityriasis rubra in which the lymphatic glands were enlarged as in this case.

DR. PIFFARD regarded the case as the disease described by Hebra under the name of pityriasis rubra. He considered it a different affection from the pityriasis rubra of Devergie as well as from the cases of pityriasis rubra in which the exfoliation of scales is a prominent feature.

DR. FOX thought the case corresponded with the pityriasis rubra of Hebra. He had seen cases of mild erythematous scaling eruptions which after lasting for years developed typical patches of eczema. The question arose in his mind as to whether there was any distinction to be made between pityriasis rubra and this general eczema. He regarded dermatitis exfoliativa and chronic forms of pityriasis rubra as distinct diseases.

DR. PIFFARD looked upon pityriasis rubra as a disease of long duration.

He had seen cases that had existed for from ten to fifteen years.

DR. ELLIOT said in closing that he considered the case as very obscure and the diagnosis so far an open question. He had been able to study and watch two cases of pityriasis rubra of Hebra for several years in the Skin and Cancer Hospital and he did not think this man resembled those in any particular. Their especial symptoms in the pityriasis rubra were, besides the redness and the scaling, a progressive atrophy of the skin and its appendages, the skin becoming apparently too small for the body, and also there was marked impairment of the general health. In view, however, of the glandular implication, the exudative symptoms in the skin, the man presented suggested a later development into an example of lymphodermia perniciosa, but provisionally the name of erythrodermia alone could be given.

Lichen Planus.—Presented by DR. KLOTZ.

The patient, Ernst E. 33 years, a miller, born in Germany, four years in United States, has generally enjoyed good health, never had a venereal disease. At the age of seventeen and twenty-three years had eruptions similar to the present one, considered at one time as suspicious of syphilis by an army surgeon. The present eruption began September 1891, at which time the patient was under great excitement on account of a love affair and was suffering from sleeplessness.

The skin lesions occupy the larger part of the chest and back, particularly the lumbar and sacral regions, the abdomen, penis and scrotum and in disseminated patches the arms and legs.

On the penis and extremities the typical nodules of lichen planus prevail;

on the scrotum and on the lower part of the back the eruption appears largely in the shape of well-defined annular and semiannular smooth elevated ridges, surrounding smooth, somewhat pigmented skin, suggesting an atrophic or depressed condition of the enclosed area. On the abdomen several small specimens of the "Perlenbroche," pearl breast-pin, arrangement are found.

On the upper part of the back and abdomen and on the thighs, where the eruption has spread more recently the efflorescences appear as small, red, almost rounded nodules, bearing a slight scale or crust on top. The characteristic waxy appearance and the depression of the centre are here almost entirely absent. If these lesions were found alone on the patient, the diagnosis of lichen planus would hardly be justified.

DR. BRONSON said cases of lichen planus differed very much among themselves, but whether the divisions of Unna should be accepted he thought questionable.

DR. BULKLEY had observed an outbreak of lichen planus upon the penis in several instances before its appearance on other parts of the body.

DR. KLOTZ referred to the fact that such marked differences sometimes existed between cases of lichen planus that one was hardly able to consider them all as the same disease or to bring them within the description given by some authors, as for instance, Dr. Taylor's. He thought, some of the more acute and generalized forms of lichen planus had been described as lichen ruber.

DR. MORROW inquired regarding the average duration of the affection. His observations had led him to believe that many cases showed a tendency to spontaneous cure.

DR. FOX thought that in the majority of cases there was a tendency for the disease to disappear within a year, but he had seen cases go over that time.

DR. ELLIOT had had a case in which the eruption had been present for eighteen years, and many who had had the disease for from three to five years. The hypertrophic form of lichen planus seemed to him to be of longer duration than the others, while those in which only the miliary eruption existed ran a more acute course, were more amenable to treatment and would get well in a few weeks or months; on the other hand, where large patches are formed by the confluence of the discrete eruption, the duration is much longer.

Dermatitis Papillaris Capillitii.—Presented by DR. FORDYCE.

The patient, a man aged 22 years, stated that the affection began six years ago at the margin of the hair at the back of the neck. At first he had some pain and a discharge of pus, causing the hairs to be matted together. This condition lasted a year or more and gradually produced a bald spot which has persisted since. On examination, an irregular bald spot about two and one-half inches in diameter is seen extending from the border of the hair at the back of the neck toward the vertex. The bald patch consists of cicatricial tissue covered here and there with tufts of hairs. The case was presented to illustrate the final stage of the affection after the disappearance of all inflammatory symptoms.

DR. ALLEN and DR. KLOTZ agreed in the diagnosis of Kaposi's disease.

DR. ELLIOT thought the case was an example of one of the forms of cicatricial alopecia described by the French writers. He would not regard

it as a dermatitis papillaris capillitii because of the absence of all keloidal tissue.

DR. PIFFARD considered the case as one of the forms of *pseudo-pelade* described by French writers.

DR. FORDYCE said that the history, location and appearance of the affection corresponded to Kaposi's dermatitis papillaris capillitii in its final stage. The scalp at the seat of the disease had been converted into sear tissue, which in places was hypertrophied. The presence or absence of keloidal tissue was in his opinion not an essential feature of the disease, though usually met with.

Pityriasis Rubra Pilaris (Devergie).—Presented by DR. ELLIOT.

Patient, an Italian woman, age 55, stated that the disease had been present three months, beginning a few months after coming to this country. The portions of the body affected were the scalp, which was covered with a thick accumulation of scales; the palms of the hands and the soles of the feet, which showed a diffusely thickened and fissured epidermis. In addition, the extensor surfaces of the extremities were occupied by discrete lesions and diffuse patches of various sizes, while on the body the efflorescences were distributed quite thickly over the shoulders, chest and buttocks. The individual lesions consisted primarily of an epidermic accumulation in a follicular opening and only later was there any reaction in the derma and a slight papular elevation was formed. In the early stages the epidermic masses could be scraped out of the follicle with ease, leaving behind scarcely a trace of its former presence. Slight itching was complained of.

DR. FOX said that all the cases he had seen with the diagnosis of lichen ruber, with the exception of the case presented before the society about one year ago as a case of psorospermiosis, were identical with this case of Dr. Elliot's in all of their essential features. He had never seen a case of lichen planus develop into one of lichen ruber, nor a case of lichen ruber present the essential characteristics of lichen planus.

DR. ELLIOT said that this was the eighth case that he had had of this affection, and he had seen five or six others; they were all identical, clinically, and differed, in his opinion, entirely from the lichen ruber of Hebra. He thought the affection continually described by Kaposi as lichen ruber acuminatus was the same disease as represented by this woman. In all the examples of the process he had seen, the eruption would disappear and reappear instead of persisting unchanged as in Hebra's cases, until the patient died. In the pityriasis pilaris the efflorescence begins in the epidermis and only secondarily becomes dermic, while in lichen ruber the primary changes are in the derma. He thought there was no connection between this disease and the lichen ruber of Hebra.

Nomenclature of Pediculosis.—DR. ALLEN read a paper with this title, in which he advocated the use of the term *pediculosis corporis* to indicate the presence upon any portion of the body of what is now variously called the pediculus pubis, ciliorum, inguinalis, axillorum, etc., according to the region in which it is found. This, the writer thought, simply led to confusion, and since the other louse which only feeds upon the body has its

habitat in the clothing, he would retain the term *pediculus vestimenti* or *vestimentorum* as the exclusive name of this variety.

Statistics were given showing the great prevalence of what he would call the *pediculus corporis*.

DR. JACKSON presented a specimen of Galloctophenone, the new drug used in the treatment of psoriasis. It does not produce any staining of the skin or clothing.

Correspondence.

CHANCRE OF THE FINGER AND GLANDULAR ENLARGEMENT.

To The Editor of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

SIR:—At the March meeting of the Genito-Urinary Section of the Academy of Medicine a patient was presented with an initial lesion of the finger. Aside from the relative rarity of the case *per se*, a special interest was afforded by the apparently unusual occurrence that the epitrochlear glands were not enlarged, as was to be expected, but that the axillary glands were enlarged. In the discussion I remarked that I had seen two cases of chancre of the finger, one at Prof. Lewin's Clinic at Berlin, the other at the New York Hospital Dispensary (Dr. Bulkley's service), where the same peculiar feature was to be observed. I further cited the explanation given by Dr. Lewin regarding glandular enlargement in these cases, namely: The superficial lymphatics of the fingers pass directly into the glands of the axilla, while the deeper lymphatics enter the epitrochlear glands.

The experience of such good observers as Dr. Keyes and Dr. R. W. Taylor did not correspond with that of Prof. Lewin. The former reported that of the 20-30 cases of initial lesion of the finger which he had seen, the epitrochlear glands were always primarily (i. e., *per continuitatem*) implicated.

In looking over the literature on this subject I find three cases of chancre of the finger without epitrochlear swelling reported by Lewin (*Verhandlungen der Berliner dermatolog. Vereinigung* December, '91 and January, '92, reviewed in *Archiv für Dermatologie und Syphilis*, 1892, Heft 3, pages, 508 and 513).

Prof. Lewin who has studied this subject carefully further remarks that in tattooing near the hand the pigment is never found in the epitrochlear glands but in the axillary.

As early as 1854 Sigmund reported a case of chancre of the finger with swelling of the axillary glands (*Wiener med. Wochenschrift*, 1854, No. 16). Plunert reported a chancre of the thumb on the outer side of the nail with swelling and suppuration of the axillary glands (*Wiener allgem. med. Zeitung*, 1879 No. 51). Robert found enlargement of the axillary glands in consequence of a superficial chancre on the fore-arm produced by tattooing (*Annales de Dermatologie et Syphilis* 1879).

Henry A. Robbins observed axillary swelling with chancre of the hand (*Medical News*, March 5, 1892).

I do not doubt that a careful perusal of the literature would reveal a

great many more cases. As to the explanation of this fact, let me state that, as far as I know, Lewin is the only one who has given an anatomical reason. Whether or not the latter is based upon personal anatomical researches is unknown to me.

It is a peculiar fact that the opinions of different authors on anatomy as Sappey, Quain, Henle, Hyrtl and others differ materially. After a careful examination of the subject, I must say that Lewin's statement does not seem to be correct.

Sappey who has written a most elaborate work on lymphatics ("Des *raissements lymphatiques*") and who is to be considered the best authority on this question says that the deeper (subaponeurotic) and the superficial (subcutaneous) lymph vessels communicate with each other.

He furthermore states that the lymph vessels which come from the fingers, form three principal groups.

1. The median group, which consists only of a few branches and joins the two following.

2. The internal or ulnar group, corresponding to the lymphatics of the fourth and fifth fingers. This group enters as a rule the epitrochlear ganglion. This may be double or triple or may be absent.

3. The external or radial group which *always* terminates directly in the axillary glands.

An affection of the thumb, index and middle fingers, e. g., a chancre, should therefore, as a rule involve the axillary glands while the epitrochlear should be affected in initial lesions of the fourth and fifth fingers. Sappey states that this is not a mere theoretical conclusion but is based upon actual clinical observation. There are of course exceptions to this rule. In lesions on the radial side of the hands or forearm there may be an epitrochlear swelling as through the extension of the inflammatory process new anastomoses between the different branches will be formed.

Possibly on closer observation it will be found that in chancres of the first three fingers primary axillary swelling is the rule and not the exception.

April 19, 1892.

HERMAN GOLDENBERG, M.D.,
26 East Sixty-second Street,

P. S.—Since having written this letter, I have been enabled, through the courtesy of my friend Dr. H. Lilienthal, to observe a case of an epithelioma on the first phalanx of the index finger, outside of the nail, where the epitrochlear gland was not affected, while the axillary gland was distinctly enlarged.

Book Reviews.

The Mütter Lectures on Surgical Pathology. Delivered before the College of Physicians of Philadelphia, 1890-91. By ROSWELL PARK, A.M., M.D., Professor of Surgery, Medical Department, University of Buffalo, etc. (Reprinted from the *Annals of Surgery*, Volumes xiii., xiv. and xv.) St. Louis: J. H. Chambers & Co., 1892.

It is a satisfaction to know that the scientific part of medicine is attracting more and more attention in our country, as well as the practical part, and that opportunities are afforded in our best institutions of learning

for acquiring a knowledge of experimental physiology and pathology, a knowledge which will give its possessor most decided advantage in his future career. While the importance of practical knowledge is in no way depreciated, the value of a knowledge of bacteriology and general pathology and physiology places their possessor in a position to practice medicine and surgery with intelligence, to interpret obscure manifestations of disease, to guard against possible accidents, and altogether to exercise the healing art from a different point of view than the one is able to do to whom such knowledge is a *terra incognita*. The lectures of Prof. Park, which are ten in number, are not intended to include all that would properly come under the term surgical pathology, but are rather a *résumé* of the advances which have been made in bacteriology and experimental pathology during the past few years. They embody not only the results of a very thorough research of all the modern literature pertaining to these subjects but also give the results of the author's own investigations concerning many of the topics discussed. Without enumerating the contents of the work attention may be called to the very thorough exposition of the condition which predispose to wound infection, the influence of the micro-organisms and their chemical products, mixed infection, surgical fever including intestinal toxæmia, peritonitis and the surgical diseases of microbic origin.

The lecture on the tests for antiseptics including the author's own investigations concerning the value of pyoktanin can be commended as most useful guides in similar studies. The work can be recommended as containing the most advanced ideas concerning the subjects treated, and renders accessible at the same time the results of a vast amount of foreign investigation which could not readily be obtained in any other work.

Traitement des maladies de la Peau, avec un abrégé de la symptomatologie, du diagnostic et de l'étiologie des dermatoses. Par le Dr. L. Brocq, médecin des hôpitaux de Paris. Deuxième édition corrigée et augmentée. One volume of 900 pages. Price, 15 francs. Paris: Octave Doin, 1892.

It is scarcely eighteen months since we had the opportunity to review the first edition of this most excellent work of Dr. Brocq. The intrinsic value of the book, together with the pleasing style in which it is written, have gained for it a wide circle of readers and added to the international reputation which its author already possesses. The fact that a prize of thirteen hundred francs has been conferred upon the work by the Academy of Medicine of Paris, and that a second edition has been called for in so short a time, renders commendation on our part superfluous. The author has included in his revised edition certain affections of the mucous membranes which are generally looked upon as belonging to the domain of the dermatologist, such as leucoplasia, black tongue, marginate desquamation of the tongue (wandering rash), glossodynia, superficial glossitis, aphthous and contagious vulvitis.

The article on eczema has been extended by a chapter on the ætiology of the dermatoses included under this term, and by a more elaborate description of eczema seborrhoicum. The chapter on the much disputed subject of lichen has been widened and new articles on actinomycosis, glanders and farcy, *maladie pyocynique*, parakeratosis, etc., have been incorporated in the text.

In spite of the addition of the new matter mentioned the author by omitting many formulæ which appeared in the first edition has been able to reduce somewhat the size of the book. In no work with which we are familiar can one find so much valuable information concerning the therapeutics of cutaneous diseases and the fact that the formulæ have been carefully revised by a competent pharmacist adds greatly to their value. Although the former edition was well printed on good paper the publisher has further improved the appearance of the work by the use of a higher finished paper and superior press work.

Syphilis in Ancient and Prehistoric Times. By DR. F. BURET, Paris, France, Translated with Notes by A. H. OHMANN-DUMESNIL, M.D., Professor of Dermatology in the St. Louis College of Physicians and Surgeons, etc., Vol. I. Philadelphia and London: The F. A. Davis Co., Publishers, 1891.

The object of the author in writing this book, he states in his Preface, has been to save the readers the herculean task of wading through a couple of thousand volumes mainly for the purpose of becoming acquainted with the history of a disease. In this laudable undertaking he has not confined himself to the reproduction of the views of other modern authors who have gone over the ground, but has set himself to the task of scrupulously studying the authors of antiquity and from these original researches he has arrived at independent results, uninfluenced by the opinions of others.

He has been enabled from a careful analysis of ancient literary documents to eliminate many errors which have crept into our conception of the origin of syphilis and at the same time to gather a mass of evidence which, to his mind at least, demonstrates the indubitable antiquity of this disease.

Whether or not the reader who runs through the documentary evidence so laboriously collected and so ingeniously presented by Dr. Buret in support of his thesis that "Syphilis dates from the creation of man," will be disposed to render a verdict "of proven" he will certainly be interested in the evidence itself and the charming manner in which it is presented. The volume before us, the first in a series of three, is entirely devoted to the proofs of the existence of syphilis from the creation of the world to the middle ages.

Separate chapters are devoted to "Syphilis in Prehistoric times," "Syphilis among the Chinese five thousand years ago," "Syphilis in Japan observed at the beginning of the 9th Century," "Syphilis among the ancient Egyptians," "Syphilis among the Hebrews in Biblical times," "Syphilis among the Hindoos one thousand years before the Christian Era," "Syphilis among the Greeks before and after Christ," "Syphilis in Rome under the Cæsars," concluding with a chapter on the "Rational Treatment of Syphilis in the 19th Century."

The first volume is certainly most readable, entertaining and instructive. We reserve our impression as to the character of the work as a whole until after the examination of the second and third volumes.

Dr. Ohmann-Dumesnil, the translator, has done his work most creditably.

History of Circumcision from the Earliest Times to the Present. Moral and Physical Reasons for its Performance, with a History of Eunuchism, Hermaphroditism, etc., and of the Different Operations Practiced upon

the Prepuce. By P. C. REMONDINO, M.D., member of the American Medical Association, etc., etc. Philadelphia: The F. A. Davis Co., Publishers, 1891.

This book, the author tells us, is an amplification of a paper on "A Plea for Circumcision," or "The Dangers that Arise from the Prepuce," read before the Southern California Medical Society, December, 1889. The importance of the subject and the impossibility of its proper presentation in a society paper suggested the arrangement of the extensive material collected in book form.

The profession is certainly indebted to Dr. Remondino for presenting a mass of valuable material upon circumcision and kindred subjects in this accessible form. The material itself is most interesting, and the author's style, while open, perhaps, to criticism from the standpoint of literary quality, is original, spirited and quite entertaining, even when verging upon the extravagant.

He starts out with the postulate that the prepuce is a relic of barbarism, which, however essential to the needs of our prehistoric ancestor as a protective sheath or covering for his procreative organ, has no place in the evolutionary requirements of the race at the present day. "Man," he says, "has now no use for any of these necessities of a long past age," and this symbol of savagery should, under the modifying influence of evolution, have disappeared from disuse as have other "vestiges of our arboreal or sylvan existence." Notwithstanding its superfluity, the prepuce, as we know, still persists, tending at times to exaggerated development, and constituting, the author maintains, "from time of birth a source of annoyance, danger, suffering and death."

We have not space to follow the author in his history of Circumcision, its remote antiquity, the theories of its origin, the curious mutilations practiced upon the genitals by various tribes and nations, infibulation, muzzling, the history of emasculation, castration and eunuchism, hermaphroditism, hypospadias, nor yet his elaborate study of circumcision practiced as a religious rite, and its influence upon health and longevity. "Circumcision is, in the opinion of the writer, the real cause of the differences in longevity and faculty for the enjoyment of life that the Hebrew enjoys in contrast to his Christian brother." He concludes this part of the subject with this glowing panegyric :

"Circumcision is like a substantial and well-secured life annuity ; every year of life you draw the benefit, and it has not any drawbacks or after-claps. Parents cannot make a better investment for their little boys, as it insures them better health, greater capacity for labor, longer life, less nervousness, sickness, loss of time and less doctors' bills, as well as it increases their chances for an euthanasian death." (!)

After thus expatiating upon the inestimable advantages of circumcision, the author next considers the dangers arising from the prepuce. He waxes fierce in its denunciations of this not only useless but offensive appendage. With a wealth of adjective vocabulary he condemns all manners and varieties of prepuces. "It is not alone the tight, constricted, glands deforming, onanism producing, cancer generating prepuce that is the particular variety of prepuce that is at the bottom of the ills and ailments, local or constitutional, that may affect man through its presence. The loose, pendulous prepuce, or even the prepuce in the evolutionary stage of disappearance,

that only loosely covers one-half of the glans, is as dangerous as his long and constricted counterpart."

The list of ills and ailments for which the prepuce, according to the author, is directly or indirectly responsible is a long and formidable one, for a knowledge of which we must refer the reader to the book itself.

The work concludes with a description of the various "Surgical Operations Performed upon the Prepuce," Notes to the Text, and quite an extensive Bibliography.

A Practical Manual of Diseases of the Skin. By GEORGE H. ROHÉ, M.D., Professor of Materia Medica, Therapeutics, and Hygiene, and formerly Professor of Dermatology in the College of Physicians and Surgeons, Baltimore, etc., etc. Assisted by J. WILLIAMS LORD, A.B., M.D., Lecturer on Dermatology and Bandaging in the College of Physicians and Surgeons; Assistant Physician to the Skin Department in the Dispensary of Johns Hopkins Hospital. Philadelphia: The F. A. Davis Co., Publishers.

Of the making of manuals there is no end—no fewer than eight manuals on skin diseases have appeared in this country within the past few years. This fact is not simply a tribute to the enterprise of publishers but may be interpreted as an evidence of the widespread interest in the subject on the part of the general profession. In the preparation of this little volume the needs of the general practitioner have been kept primarily in view. The description of the diseases are brief and concise, little space has been given to theoretical speculations on etiology and pathology, while the simplest and most direct methods of treatment are intelligently indicated.

International Atlas of Rare Skin Diseases. Editors, MALCOLM MORRIS, London; P. G. UNNA, Hamburg; H. LELOIR, Lille; and L. A. DUHRING, Philadelphia. Publishers: Leopold Voss, Hamburg and Leipzig; H. K. Lewis, London; G. Masson, Paris.

In noticing previous numbers of this superb atlas we have spoken in the most commendatory terms of the superior quality of the chromo-lithographic plates. The illustrations in Part V, which is now before us, exhibit the same high order of artistic excellence.

Plate XIV, represents a case of *HYPERKERATOSIS STRIATA ET FOLLICULARIS*, by H. von Hebra.

Plate XV, *MULTIPLE BENIGN TUMOR-LIKE GROWTHS OF THE SKIN*, by E. Schweninger and F. Buzzi—*CASE OF CIRCUMSCRIBED DERMATO MYCOSIS OF THE HAND*, by N. Mansuroff.

Plate XVI, *ERYTHEMA GYRATUM PERSTANS* in the two elder members of a family, by T. Colcott Fox.

The plates are all admirably well executed and represent both in flesh tints and the life-like delineation of the lesions, the best effects obtainable by the chromo-lithographic process.

Items.

The American Association of Andrology and Syphilology.—This Association will hold its Sixth Annual Meeting at the Spring House, Richfield Springs, on Tuesday and Wednesday, the 21st and 22d of June, 1892. Two sessions will be held daily. The following is a list of the papers announced to be read:

On the Primary Healing of Wounds after the Excision of Inguinal Bubo. By Dr. Francis S. Watson, of Boston.

The Relationship of Syphilis to Stricture of the Rectum. By Dr. R. W. Taylor, of New York City.

Practical Points about Recurrent Villous Growth in the Bladder, and its Removal upon Recurrence by the Supra-pubic Route. By Dr. E. L. Keyes, of New York City.

A Case of Sacculated Bladder. By Dr. A. T. Cabot, of Boston.

Litholopaxy: A New Form of Lithotrite and Aspirator, with Cases Illustrating their Use. By Dr. George Chismore, of San Francisco.

Partial Extirpation of the Sound Bladder in the Removal of Neoplasms. By Dr. R. F. Weir, of New York City.

Sexual Hygiene. By Dr. Edward R. Palmer, of Louisville.

Preliminary Report of a New Parasitic Nematoid Worm, Associated with and Probably Causing Urethritis of Seventeen Years Standing. By Dr. F. Tilden Brown, of New York City.

The Perfected Electro-Urethroscope. By Dr. W. K. Otis, of New York City.

Some Observations upon the Pathology, Etiology and Symptomatology of Granulations and Vascular Exerescences of the Male Bladder, their Resemblance to Tuberculosis: A Clinical Study based upon Twelve Cases Treated by Supra-pubic and Perineal Cystotomy and Grattage, Microscopic Sections and Drawings. By Dr. Samuel Alexander, of New York City.

Local Treatment of Cystitis. By Dr. W. K. Otis, of New York.

Further Report on the Treatment of Gonorrhœa. By Dr. W. Frank Glenn, of Nashville.

Operative treatment for the Relief of Urinary Fistulæ. By Dr. J. Blake White, of New York.

Varicocele and its Radical Cure. By Dr. J. Blake White, of New York.

Failure of Diuretin to Prevent Urethral Fever: A Supplementary Note. By Dr. E. L. Keyes, of New York.

Retention of Urine. Exhibition of a Catheter for its Relief. By Dr. J. Blake White, of New York.

Report of a Case of Congenital Absence of the Urethra in a Female, Causing Complete Incontinence of Urine. Catheterization of the Ureters. New Urethra made by Plastic Operation; perfect Cure. Some Observations upon Ureteral Catheterization in two Other Cases, with Illustrations and Diagrams. By Dr. Samuel Alexander, of New York.

Some Suggestions as to the Treatment of Prolapse of the Rectum; Report of Two Cases with Photographs and Diagrams. By Dr. Samuel Alexander, of New York.

The Pathology of Syphilitic Nephritis. By Dr. J. A. Fordyce, of New York.

Discussion on Urethral Fever. By Dr. John P. Bryson, of St. Louis; Dr. F. Tilden Brown, of New York; Dr. E. L. Keyes, of New York.

Discussion on Prostatectomy. By Dr. W. T. Belfield, of Chicago; Dr. John P. Bryson, of St. Louis, and Dr. F. S. Watson, of Boston.

Members of the Association can engage room by writing to the Spring House, Richfield Springs, New York. J. A. FORDYCE, M.D., *Secretary*.

International Dermatological Congress in Vienna.—In the name of the committee of organization a cordial invitation is extended to the members of the American Dermatological Association and of the New York Dermatological Society, to be present at the Second International Dermatological Congress which will be held in Vienna from the 5th to the 10th of September 1892. Prof. Kaposi, *President*.

The membership fee (five dollars), should be sent with the titles of papers intended for presentation to the Secretary for North America, Dr. P. A. Morrow, 66 West 40th Street, New York, or to the Secretary-General of the Congress, Dr. Gustav Riehl, Wien 1/20, Bellaria Strasse 12.

Syphilis of the Rectum.—Hahn (*Deut. med. Woch.*, January, 28, 1892) reports a case of syphilitic ulceration of the rectum in a woman aged 33. At the autopsy the mucous membrane was found to be of a dark-green color, and extensively ulcerated for a distance of 16 cm. from the anus, with but few areas of intact mucous membrane. There was amyloid disease of the kidneys and spleen, and also periosteal thickenings over both tibiae. Anterior colotomy had been successfully performed during life. The vomiting, however, persisted, and the author would attribute this to the renal disease. Hahn thinks ulcerative proctitis (occurring almost exclusively in women) is seldom really due to syphilis. After other measures have been tried, extirpation of the rectum and colotomy alone remain. Some cases, when of limited extent, can be cured by the former procedure.

The Treatment of Gonorrhœa.—JONATHAN HUTCHINSON (*Archives of Surgery*, January, 1892).

The writer states that he has long ago laid aside the traditions of his student days which taught that salines only should be used in the acute stages, and that abortive plans were dangerous.

He uses an injection of a solution of chloride of zinc, two grains to the ounce; next sandal-wood oil capsules and, lastly, a purgative night-dose with bromide of potassium. The injection is used three or four times a day, the capsules (ten or twenty minims) taken three times a day. The ingredients of the night dose are three drachms of Epsom salts, and half a drachm of bromide of potassium.

Hæmoglobinuria Due to Quinine. DR. P. MUSCATO. (*Gazzetta degli Ospitali*, No. 17, 1890.)

The writer reports four cases of hæmoglobinuria occurring in patients after the administration of quinine for malarial disease. That it was due to the quinine and not the malaria was evidenced by the fact that it occurred in each exhibition of the drug, and ceased with its discontinuance.



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Original Communications.

CONGENITAL DEFORMITY OF EXTERNAL FEMALE GENITALS, ENTIRE ABSENCE OF URETHRA. SPONTANEOUS DORSAL DISLOCATION OF THE HIP AS THE RESULT OF EFFORTS TO RETAIN URINE. CORRECTION OF DEFORMITY AND RESTORATION OF URETHRA BY PLASTIC OPERATION. WITH SOME OBSERVATIONS UPON THE TECHNIQUE OF URETERAL CATHETERISM. (WITH CHROMO-LITHOGRAPH.)

BY

SAMUEL ALEXANDER, M.A., M.D.

Professor of Genito-Urinary Surgery, Syphilology and Dermatology in the Bellevue Hospital Medical College. Visiting Surgeon to Bellevue Hospital, etc.

CONGENITAL defects in the development of the female urethra are not common. They are associated in most cases with defects or with malformation in other parts of the urinary and genital organs, or of the rectum and anus. The urethra seldom is the only defective organ. Congenital hypospadias, either with or without developmental defect in other parts has been observed in a number of cases.¹ Epispadias, however, is very uncommon and in 1863 its occurrence in the female was denied by so competent an observer as Felix Guyon.² The cases that have been reported in which the whole urethra was wanting are unquestionably forms of epispadias. In these cases the urethral defect is always associated with more or less well marked defects in the development of the clitoris, nymphæ, vestibule, labia majora and mons veneris. A full and complete description of female epispadias has not yet been

¹ See Bibliography appended.

² Guyon. Thesis. Paris, 1863. This declaration has been retracted. See Nunez. Thesis. Paris, 1882.

written, because until recently a sufficient number of cases had not been observed. It would be manifestly out of place for me at this time to consider this subject at length, but in order to bring into prominence the principal characteristic features common to this class of cases, I shall give in connection with the notes of a very interesting case of female epispadias, a brief description of the other cases of this condition which have been reported.

The following list of cases, I believe, includes every reported case of epispadias in the female in which the urethral defect was the only important abnormality.

*Gosselin's Case.*¹—The entire urethra and a portion of the wall of the bladder was wanting. There was complete incontinence of urine. The clitoris was bifid. Under the symphysis was an opening into the bladder fifteen millimetres long. The prolapsed wall of the bladder was visible through this opening. The patient was able to retain urine for two hours.

*Kleinwachter's Case.*²—The urethra was rudimentary. The opening into the bladder admitted the finger easily. Complete incontinence of urine. The anterior wall of the bladder was short and steep. The posterior wall was normal. In the dorsal position the urine was expelled at each inspiration, pressure upon the abdomen caused it to gush out. The clitoris was bifid. When standing the urethra was partially closed by the approximation of the two halves of the clitoris, a small quantity of urine could then be retained.

*Frommel's Case.*³—Girl. Aged 26. Well developed. Hair upon the pubes except at the middle of the symphysis which was bare as far as the anterior commissure of the vulva. This bare spot formed a furrow leading to an opening into the bladder which was just beneath the pubes. The labia and nymphæ were well developed, but did not meet above. The clitoris was bifid. Each half was situated at the inner border of a labium majus. When the two halves of the clitoris were pushed together all looked normal. The anterior wall of the urethra was defective. A swelling covered by vividly red mucous membrane occupied the position of the posterior wall of the urethra. Pressure upon this swelling caused the urine to escape. Sometimes the urine could be retained for ten minutes.

*Surmay's Case.*⁴—Girl, aged 14. Complete incontinence of urine, when standing. When lying down a small quantity of urine could be retained. The nymphæ were rudimentary and

¹ Gosselin. *Gaz. des hôp.*, 1851.

² Kleinwachter. *Monatschr.* 1. *Geburtsk.* vol. 34.

³ Frommel. *Ztsch. f. Geburtsk. u. Gyn.* 1882, vii. p. 430.

⁴ Surmay. *Union Med.* 1886. xxxii. p. 580.

distorted. The labia majora did not meet at the anterior commissure but were separated by a space. This space was immediately over the symphysis and was covered by thin semi-mucous membrane continuous above, with the skin covering the abdomen. The mons veneris was flat. The clitoris, prepuce and vestibule were wanting. Under the symphysis there was a small ovoid tumor red in color and very sensitive. Pressing upon this the finger entered the bladder. The urethra was entirely absent. The bladder was partially closed by this tumor. The vagina and uterus were normal. The sphincter ani was weak and there had been prolapse of the rectum since the patient's second year.

*Behncke's Case.*¹—A girl three years old, born at full term. The urethra absent. The bladder opened into the vagina. The labia majora were well developed. The nymphæ and clitoris were wanting. The child had not urinated since birth. The bladder was tense. A catheter was introduced into the vagina and a viciid gelatinous mass which filled the latter was removed. Ebstein (*in the Arch. f. Dermat. u. Syph.* 1891. *Second appendix*), says that the presence of this mass in the vagina is not uncommon. After its removal the urine flowed freely and there was complete incontinence.

*Nunez's Case.*²—A woman, age 27. Urethra absent. The labia majora met below but were separated at the upper commissure. The meatus and vestibule were wanting. In their place there was a large opening under the symphysis leading into the bladder. The posterior wall of the urethra was of nearly normal length. The anterior wall was entirely wanting except under the symphysis. The mons veneris was flat and covered in front with semi-mucous membrane. There were no hairs upon the pubes.

*Aufret's Case.*³—Girl, aged 19. Congenital incontinence of urine, especially when asleep and when walking. The bladder did not empty itself fully but a small quantity of urine constantly was retained. The urethra was wanting. In its place was a slit .01 of a centimetre by .015 of a centimetre. Through this opening the finger passed into the bladder. The anterior wall of the urethra was entirely wanting. The clitoris, upper half of the labia majora and upper half of the nymphæ were wanting. The vaginal and rectal sphincters were relaxed. After walking for four or five hours there was prolapse of the uterus through the dilated orifice of the hymen.

*Dohrn's Case.*⁴—Girl, aged 18. Well developed. Menstru-

¹ Behncke's. Ugeskrift. f. Læger 1875, xxix. 11-13.

² Nunez. Thesis. Paris, 1882.

³ Aufret. Bull. méd. Brest 1892, p. 781. Et Ann. des Mal. Gen. Urin. 1892, May, p. 403.

⁴ Dohrn. Ztschr. f. Geburtsh. u. Gyn., 1886, xii. p. 117-120.

ated at 16. Complete incontinence when lying down and when asleep. Could retain urine for one or two hours when standing. The mons veneris was flat. The labia majora and nymphae were free and their upper parts resembled the "crest of a cock." They were separated at the upper commissure. The clitoris was bifid. Behind the latter was a funnel shaped orifice leading into the bladder which admitted the little finger. This slit was three centimetres deep. The vesical sphincter was relaxed.

*Möricke's Case.*¹—In this case which resembles those described above, there was complete absence of the urethra, and four operations performed by Shroeder to restore the urethra failed.

*Petit's Cases.*²—1. Girl, aged 4 years. Urethra, nymphae and clitoris were wanting.

2. A girl, age not stated. The urethra and neck of the bladder wanting; other parts normal.

Several cases of *incomplete* epispadias have been reported in which there was partial incontinence of urine by Roser,³ Rutherford,⁴ Funk,⁵ and Richelot.⁶ The latter author mentions in addition a case which he had seen of this kind under the care of M. Bazy. Timmer⁷ also has published a case, the details of which I have not been able to obtain—it being impossible to procure here the Amsterdam Journal in which it was published.

The Author's Case.—Annie F., aged 15, Irish, admitted to Ward 16, Bellevue Hospital, March 2d, 1892. The patient was sent to me by Dr. R. H. Sayre of New York, who has furnished me with the following history of the case:

The girl was born with absence of the urethra, the bladder opening just below the pubes by a hole sufficiently large to admit the little finger. In consequence of this malformation there was incontinence of urine, except when the legs were strongly adducted. At birth there was no malformation of any other part of the body and until the age of eleven her hips and legs were symmetrical. Her mother who gives these details, did not see her between the ages of eleven and fifteen, but says that when she left the child the lower limbs were parallel and of equal length. The girl says that about four years ago she was kicked in the left buttock. This caused her considerable pain but did not prevent her from walking. After the accident she continued

¹ Möricke. Ztschr. f. Gyn., 1880, vol. v., p. 327.

² Petit. Œuvres Complètes, p. 793.

³ Roser. Würtemb. Correspond. Bl., 1861, No. 20.

⁴ Rutherford. New York Medical Record, 1890, xxxviii., p. 492.

⁵ Funk. Wochenbl. der Ges. Wiener Aerzte, 1870, No. 22.

⁶ Richelot. Union Médical, 1887, xliii., p. 365.

⁷ Timmer. Nederl. Tijdsch. f. Geneesk., Amsterdam, 1890, 2 R. xxvi., 632-641.

to grow lamer, and her left thigh became very strongly adducted and flexed upon the trunk. Dr. Sayre first saw her in July, 1891. At that time the left thigh was flexed on the trunk at about 40 degrees and was adducted as strongly as the soft parts would allow, the head of the femur was upon the dorsum of the ilium. The great trochanter being about two inches above Nelaton's line. Ordinary movements of the joint were painless and the girl could walk a considerable distance without more fatigue than would naturally be incident to the distorted position of the limb. The position of the left hip was that of a traumatic dislocation of the head of the femur on the dorsum of the ilium. There was no history of hip disease. The deformity came on gradually. It seems probable that the edge of the acetabulum was broken off at the time of the accident mentioned above, and that the constant muscular contraction incident to the patient's endeavor to retain her urine caused the head of the bone to slip out of the socket. Subsequent operation showed that the neck of the femur was not fractured. On July 14, 1891, Dr. Sayre cut the adductors of the left thigh subcutaneously but the deformity was not much relieved by the operation. With the intention of cutting the femur from its attachment to the ilium and replacing the head of the bone in the old acetabulum, he cut down on the outer side of the left thigh over the great trochanter and, pushing the soft parts aside, cut the psoas and iliacus muscles from their attachments to the lesser trochanter. This enabled him to bring the legs parallel but he found that the head of the femur was so nicely secured on the dorsum that he decided in view of the impossibility of keeping the wound aseptic owing to the incontinence of urine, to postpone further operative interference. After the wound had healed by granulation, the patient's legs could be separated far enough to permit an operation upon the urethra, and the case then was transferred to my service in Bellevue Hospital. The day after she was admitted I made an examination and at that time the following additional notes were made:

The girl is shorter than the average female at sixteen by several inches. She is well developed and muscular. Her breasts are prominent. In an upright position the left leg is several inches shorter than the right. The thighs are nearly parallel. (See Fig. 1 and Fig. 2). There is complete incontinence of urine. But the patient can retain urine by keeping the thighs closely pressed together and by rotating the left hip inward.

She walks rapidly but with the characteristic limp of a dorsal dislocation of the hip.

Examined in the dorsal position. The mons veneris is thin, not prominent, and the anterior face of the symphysis is covered by a semi-mucous membrane which is contin-

nons below with the mucous membrane of the bladder, and above with the skin over the abdomen. There are a few hairs scattered over the left side of the pubis, but the rest of the mons veneris is bare. The labia majora are small. They meet below in front of the vagina but are widely separated above. The labia minora are small and distorted. There is no clitoris nor prepuce. The bladder opens just beneath the pubic arch by an irregular hole one and a half by one and three-quarter inches; this easily admits the finger. The urethra is entirely



FIG. 1

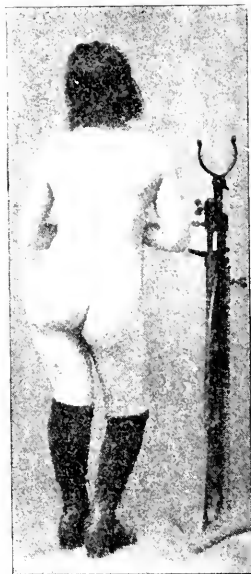


FIG. 2

absent. (See Colored Plate, Fig. 1.) The opening is less than one-half of an inch in length. Through it the interior of the bladder is visible. The mucous membrane of the bladder is reflected from the upper margin of the opening over the front of the pubis for a distance of about an inch and a half. The vagina is normally situated but is small; its orifice is closed

by a strong circular hymen with a central opening. The latter admits with difficulty the tip of the little finger. The uterus is small but is otherwise normal. Fluid injected into the bladder by introducing the nozzle of a syringe into the opening is expelled at each inspiration. In the dorsal position the bladder



FIG. 3

retains about half an ounce of fluid. None is retained when in the erect posture, except when the thighs are held firmly together.

Cystoscopic examination.—Five ounces of fluid were injected into the bladder and retained by pressing the left labium over the opening. The mucous membrane of the bladder was of a healthy pink color; the vessels in the neighborhood of the base and of the trigone were congested; the ureteral orifices were in a normal position. The functional activity of the kidneys apparently normal.

When the patient entered the hospital, it was asserted that she menstruated vicariously from the bladder. This, however, proved to be an error of observation, the blood entering the bladder from the vagina. The menstrual period was regular, and lasted two days. The flow was moderate and painless.

On March 17th, I catheterized the ureters as a preliminary step to an operation for restoring the urethra. The patient was placed in Trendelenburg's position. The opening into the bladder was distended as far as possible by wire retractors. (See Fig. 3.) A very small electric lamp, fitted upon a thin, hard rubber handle and protected by a hood, which I had



FIG. 4

made especially for the occasion, was introduced into the bladder and served the double purpose of illuminating its cavity and of lifting up the posterior and upper wall. I was enabled after drying the bladder to get a fairly clear view of the orifice of the right ureter and to introduce into it one of Albarran's ureteral catheters passed over a stylet. (See Fig. 4.) The orifice

of the left ureter I had great trouble in finding as it was flat and between two folds of the mucous membrane. After a great deal of trouble I finally succeeded in introducing into it a similar catheter to that placed in the right ureter. This operation, however, was by no means easy, an hour and twenty minutes being required to perform it. Twice after introducing the catheter into the right ureter, it was pulled out while searching for the orifice of the other ureter. During the operation I tried various expedients and positions but found none so satisfactory as that I have described. The urine flowed freely through the catheters after their introduction, the functional activity of the right kidney being more marked than the left. After making careful observations as to the action of each kidney, the catheters were secured.

The patient was put to bed, the tubes remained in place during the night and all the following day, causing no inconvenience or discomfort. The patient, however, complained of being very sore about the vesical orifice from the effects of the prolonged manipulation. The opening into the bladder was partly closed by the swelling of the mucous membrane.

On March 21st I performed a plastic operation to restore the urethra. The ureteral catheters, which had remained in place for two days, had been forced out a few hours before the time for the operation by the patient's straining at stool. I attempted to replace them but found so much difficulty, from the swollen and congested condition of the mucous membrane about the opening into the bladder that I abandoned the attempt, and decided to drain the bladder by a *cathéter à demeure*.

The operation consisted in making a new urethra and in bringing together the upper portion of the labia majora so as to cover the orifice of the new canal. I made an irregular curvilinear incision beginning at a point below the opening into the bladder and surrounding the latter at a distance of about one-half an inch. The shape of the incision is shown in Fig. 5. The mucous membrane and skin included in this incision were dissected up toward the vesical orifice, the dissection was carried as far as possible beneath the arch of the pubes, and the neck of the bladder freely separated from the latter. The lower margin of the opening into the bladder was loosened from the vaginal septum as far as could be done safely. The flap thus made resembled a wide mouth funnel with an irregular border, the bottom of the funnel being the opening into the bladder. In order to narrow the orifice portions of the border A-B and C-D were united (See Fig. 5), and three rows of "purse stitches" were introduced upon the upper and outer surface of the urethra. The first row was put at the neck of the bladder, the third near the orifice of the funnel, and the other row midway between these. A new urethra thus was formed. It admitted

snugly a catheter (No. 18 French), and was about one and three-quarters of an inch in length. The urethra was twisted upon itself and stitched in place by uniting the portion of its margin (C and D, Fig. 5) with the vaginal septum. The skin on each side of the space from which the urethra had been taken was dissected up for about an inch and a half and the edges brought together by deep sutures. The upper portion of the labia majora were loosened and brought together, and to the inner side of these the upper margin of the urethra was stitched. Immediately after the operation the bladder retained ten ounces of

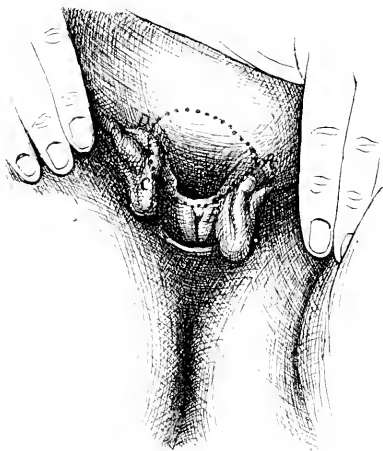


FIG. 5

fluid. A catheter having an eye at its end was introduced through the urethra into the bladder and retained by a stitch. The patient made an uninterrupted recovery, the catheter was removed at the end of the fourth day. Some urine, however, was passed along the catheter and, although this did not injure the new urethra, it prevented primary union of the upper portion of the labia majora, which separated, thus depriving the urethra of the pressure necessary to insure complete retention of urine.

After the wound had granulated, the girl had control over her urine during the night, and when sitting or lying down, but there was some dribbling of urine when she walked. 1 per-

formed, therefore, another operation, which required two sittings. At the first of these I narrowed the urethra, by again dissecting it free from the pubic arch, both above and at the sides and by making two external pleats, without dividing the mucous membrane, running the length of the canal. These were made by introducing on each side a continuous overhand suture of fine cat gut. The urethra was then stitched in place. (See Plate 1, Fig. 2.)

A week later after the urethra had become fixed in place, I refreshed the upper part of the inner surfaces of the nymphæ and brought these together so as to press upon the urethra. Into the latter I tried a catheter and I then repeated the operation of restoring the upper portion of the labia majora. The result of this operation seems to be satisfactory. The girl has control over her urine at all times, and can retain it for four hours during the day, and for eight hours at night. By uniting only the upper portion of the nymphæ I did not close the vaginal orifice, and yet obtained the necessary pressure for the urethra.

Remarks.—Deformities of this class cause so much discomfort and distress that all cases are likely to come under surgical observation. The various operations which have been devised for restoring the urethra are more or less unsatisfactory, for two reasons, first, because in most cases there is an almost entire absence of an efficient vesical sphincter, and secondly, because it is difficult to obtain primary union, owing to infection of the wound by the urine. In the case which I have reported above the very satisfactory result, was due, I believe, to the thorough separation of the neck of the bladder from its attachments to the pubic arch. This separation enabled me to utilize the circular fibres about the internal urethral orifice as a sphincter. I believe in these cases that where it can be done the neck of the bladder should be dissected from its attachments to the pubic arch as far as possible, and the internal urethral orifice narrowed in the manner described above. The mode of urethroplasty employed in this case is, I think, new. By making the urethra out of a single flap, the chances of failure by infection of the wound by urine is greatly lessened. The power of the fibres at the neck of the bladder is not sufficient alone in most cases, to prevent the escape of urine. Some pressure, therefore, should be made, such as, for example, by uniting the nymphæ, or at least their upper portion, in front of the new urethra. In connection with the second point of difficulty in these operations, viz: to prevent infection of the wound by

contact of urine, I desire to offer a few remarks upon ureteral catheterism.

The value of ureteral catheterism in diagnosis of kidney diseases, of course, cannot be over-estimated. The information to be gained by the introduction of the catheter, even for a short time into the ureter is so great that no effort nor pains should be spared to make this operation reasonably easy to perform. Catheterism of both ureters would be of the utmost value in all plastic operations upon the bladder and the urethra if it were less difficult. During the last few years various suggestions have been made as to the best method of accomplishing this. Up to the present, however, very little has been done that is of practical value. Some of the suggestions that have been made show such an ignorance of the difficulties connected with ureteral catheterism as can only be explained by supposing that the writers making them had never put their suggestions to a practical test. There are three ways of catheterizing the ureters which have any practical value. These are, *first*, by means of the cystoscope, *second*, by opening the bladder above the pubes, and *third*, through the urethra.

I. The first of these methods has been described and used successfully by several different observers. Poyrier describes the operation at length. He used the Boisseau-Rocher, in preference to Nitze's cystoscope. Having found the orifice of the urethra with this he inserts a small catheter through the tunnel made in the cystoscope for the purpose, and guides this under the eye into the ureter. Other observers have described the same method. All these writers, however, have failed to convey a sufficiently clear idea of the difficulties of the operation. I have attempted to catheterize the ureters in this way in several cases and also tried upon the cadaver. In one case, the bladder was the seat of a tubercular cystitis, and the left kidney was thought to be diseased also, a tubercular pyelitis having been diagnosed. In order to determine this before cutting down upon the kidney, I catheterized the left ureter. The urine flowed away clear from the catheter. I believe that in the near future this method will be made practicable, but with any of the cystoscopes in use at the present time the operation cannot be regarded as practical for clinical use.

I have been experimenting for some time with different modifications of the cystoscope in an endeavor to simplify the operation of ureteral catheterism, but have not made sufficient progress as yet to report the result of my work.

II. Catheterism of the ureters by suprapubic cystotomy has been performed usually during operations upon the bladder accompanied by severe hemorrhage, before tamponing. The ureteral catheters of Albarran were devised originally for this purpose. Suprapubic cystotomy is so simple an operation, and requires so little time for its performance and the wound in the bladder heals so rapidly, that at the present time in obscure cases of kidney disease where a diagnosis cannot be made by the cystoscope, I should not hesitate to perform the high operation for the purpose of catheterizing the ureters, closing the wound in the bladder completely after the operation. This is the easiest way certainly.

III. The third method of catheterizing the ureters, viz., through the urethra, is only possible, of course, in women. In certain cases, owing either to the urethra being unusually long or very rigid, the operation is impossible, and even in cases of partial or entire absence of the urethra the operation is extremely difficult. In two cases, besides the one reported above, I have succeeded in introducing an Albarran catheter into one ureter through the urethra. In both of these cases the urethra was normal, the operation being performed for purposes of diagnosis.

I offer the following suggestions as the result of my experience. The patient should be anesthetized and placed in Trendelenburg's position. If a sufficient quantity of water can be retained in the bladder by pressure or otherwise, to allow the cystoscope to be used, the orifice of the ureter to be catheterized should be sought for with the cystoscope, and when found the finger should be passed into the vagina and the position of the ureter marked. The urethra should then be as widely dilated as possible by the use of some dilator. One of Albarran's catheters may then be introduced into the bladder over a stylet made of soft copper so as to be bent into the shape required, and an attempt made by touch to guide it into the ureter. I have been able to do this in one of the cases mentioned above. When the cystoscope cannot be used the vesical orifice should be held apart by thin wire specula, and the interior of the bladder should be wiped dry; a very small electric lamp, protected by a hood and mounted upon a very thin but rigid handle, may then be introduced into the bladder, the latter not only illuminates the bladder but can be used to push up the posterior wall, the orifice of the ureter to be catheterized is sought for by looking through the vesical open-

ing and when found the catheter is introduced under the eye or by touch. There are very few cases, however, in which this method is practicable.

For nearly three weeks before the first operation, the girl whose case I have reported at length in this paper, was under constant observation in the hospital. During this period a number of experiments were made to determine certain points as to the sensibility, contractibility and resistance of the bladder, and as to the mechanism of micturition. After the ureters were catheterized, observations were made as to the functional activity of the kidneys. It is not necessary to record here these investigations in detail, nor to give the results obtained in regard to questions upon which all observers agree. I desire to call attention, however, to the following observations which are of sufficient importance, I believe, to justify their record.

1. The most important point in the mechanism of micturition as to which observers differ, is in regard to the cause of the desire to pass water. The majority of authors accept the view advanced by Kuss and Duval, viz., that the sensation is due to the entrance of urine into the urethra. The result of observations made by Guyon, and others of the Necker school make the contraction of the wall of the bladder the principal cause. My own investigations upon this point made in a large number of cases in 1887 and 1888 led me to adopt the latter explanation, although I was not able to convince myself that in some conditions the sensation was not produced without contraction of the bladder.

The entire absence of the urethra in this case, and the large size of the opening into the bladder, gave me an excellent opportunity to determine this question, at least in the female. The result of a number of different observations showed that the contraction of the bladder whether caused by distension, or by irritation of the mucous membrane, or by the repeated and violent contacts of a sound introduced through the opening but not touching its sides, was followed immediately by a desire to pass water, and that the more powerful the contraction the more intense was the sensation or desire to pass water.

2. Before introducing the catheters into the ureters I made a cystoscopic examination and observed that the period between the expulsive acts of the right ureter was between 45'' and 65'' and of the left ureter between 55'' and 70''. After the catheters were in place the ureters discharged alternately, a physiological

fact which although mentioned by some physiologists, has been questioned, I believe.

The flow from the left ureter during the expulsive act differed from that from the right. From the former the urine was discharged in rapid drops, the quantity collected during a single discharge was 20 to 25 min. From the right ureter the urine was expelled forcibly in a gush, the amount at each discharge was a little larger than that from the left. The interval between the end of the flow from the left ureter and the beginning of the flow from the right varied, the average time being about one minute. There was no chemical difference in the urine collected from each kidney. The urine continued to flow from the tubes until the latter were forced out forty hours after they were put in place. While in the ureters they caused the girl no pain at any time. I observed, however, this interesting fact, that after the catheters had been introduced for some hours the quantity of urine increased very much over that passed immediately after they were put in place, and that the interval between the expulsive acts of the ureters was shortened. This increase in the quantity of urine and in the muscular action of the ureter was progressive while the tubes remained in place and was probably due to the irritation which they caused. This fact is of interest as offering an explanation of polyuria in certain cases of cystitis, without pyelitis where the orifices of the ureters and the surface of the bladder in their neighborhood are the principal seat of the inflammation. During the expulsive act of the ureters if the bladder was made to contract forcibly the flow of urine was arrested during the contraction and began again as soon as the contraction ceased.

3. Another observation of interest may be mentioned, viz., the effect of forcible contraction upon the shape of the bladder. In testing the sensibility of the mucous membrane to the contact of irritants, I observed that during a full contraction of the bladder when it was empty, the posterior-superior and the anterior-inferior walls not only were approximated closely but that the former seemed to be shortened, thus elevating the lowest part of the organ and insuring the complete emptying of its cavity. It is to be regretted that in the other reported cases of epispadias in the female no attention was given by the observers, to the investigation of questions in experimental physiology.

95 Park Avenue, June, 1892.

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A SECOND CASE OF LUPUS ERYTHEMATOSUS WITH FATAL COMPLICATIONS.¹

BY

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THE following notes were kindly furnished me by Dr. N. B. Carson, with whom I subsequently saw the patient in consultation:

Miss K., aged 14, had enjoyed previous good health. Father and mother both living and apparently well, but the girl's maternal grandmother died of phthisis, as did also a brother and sister. On April 9, 1891, Dr. Carson was consulted in regard to a well-defined reddish eruption situated on the nose and over the malar regions, and which presently assumed a typical butterfly patch appearance. There were no general symptoms at this time.

The eruption had come out quite suddenly a short while before the patient was seen by Dr. Carson. She was seen again on April 21st, when the eruption was noted as being more pronounced, that is, of a darker red, and with more defined borders, but still in the same situations.

April 27th. The patient was visited at home by Dr. Carson. He found that her menses had been checked after a chill the day before. Temperature 102° F.; tongue coated, with red tip and edges. Ordered quinine and blue mass.

April 28th. Temperature 103° F.; eruption the same as to situation, but darker.

April 30th. No change; treatment henceforth expectant.

May 7th. Much worse, eyes injected; eruption had extended in the form of discrete macules over forehead and chin. Obstinate constipation, and some pain in abdomen. Pulse 120, full and strong; temperature 103° F.; tongue covered with brown, dirty coat; anorexia complete. From this on the condition became graver, and on April 9th a honey-like secretion

¹ This paper was announced to be read before the American Dermatological Association Sept. 25, 1891, but owing to the absence of the writer did not come before the meeting.

appeared on nose and cheeks. Purulent discharge from the ear was also noticed at this time. The case went on from bad to worse, the temperature reached 105° F. and the pulse 150. She died on May 10th with symptoms, according to Dr. Carson, of general septic infection.

On May 7th Dr. Carson asked me to see Miss K. with him, saying that he particularly desired me to examine the patient as she presented certain general and local symptoms that reminded him strongly of the case of fatal lupus erythematosus that we had seen together a year or more before, and which I reported to the Association at the meeting in 1889.

When I saw Miss K. for the first time I found her general condition very critical, in fact, as noted above, she died three days afterwards.

On inspection I discovered that the nose and cheeks were occupied by a clearly defined butterfly eruption that I agreed with Dr. Carson in calling it lupus erythematosus. Here and there in this eruptive area were pus crusts of a honey-like consistence, exactly as in the case of Mr. H.¹ In this case also, discrete eruptive spots were to be observed on the forehead and chin. I forgot to add that the ears were also involved in the lupous process. I asked Dr. C. if the eruptive spots were also to be found on the thorax as in our other case, to which he replied negatively; but when I examined this region with him we observed that there were many such lesions. The hands, feet and other parts of the body were free.

The submaxillary glands were swollen somewhat, but not excessively. An examination of the honey-like secretion obtained post-mortem by Dr. Ravold revealed nothing but pus cocci. He was not allowed to secure any of the involved tissue.

The salient features of the case reported at our meeting in 1889, and referred to above are briefly these: Mr. D., æt. 23, first came under my care with an acute dermatitis occupying the nose, cheeks and ears; it was sharply defined, and of a butterfly shape. After a period of soothing treatment the acute inflammation subsided, and the typical features of an erythematosus lupus stood revealed. The acute dermatitis had been grafted on a pre-existing lupus by the use of a chrysarobin salve. The backs and palms of the hands, and the dorsal and plantar surfaces of the feet were affected here and there with red, scaly and slightly thickened spots. Mr. H. suffered much

¹ See *Journal of Cutaneous and Genito-Urinary Diseases*, Dec., 1889.

from deep boring pains in the limbs, but otherwise seemed well. Some months after this, following the use of an irritating salve to the face, the involved region became swollen, fever developed, and the glands in the neck became very much enlarged. Dark red eruptive spots appeared on the forehead, chin and over the thorax, and blood crusts and pus crusts were to be noted on the cheeks, nose and ears, that is, over the regions originally involved.

The patient fell into a typhoid state, the temperature reaching as high as 104° F.; but gradually he grew better, the fever decreased although the temperature never became normal, and he was enabled to go from his bed to a chair. The skin disease also slowly improved, the swelling diminished and the crusts dropped off; in fact the erythematous lupus underwent complete involution. The lymphatic gland involvement, however, grew steadily worse, gland after gland became implicated in a tubercular process, hectic supervened, and the patient finally succumbed to an intercurrent pneumonia.

In commenting on this case I remarked that "it is quite possible that the various local and systemic disturbances observed in this case bore no real relation to the erythematous lupus from which the patient was suffering; but having in mind the phenomena described by Kaposi in connection with the grave form of the disease called by him lupus erythematosus disseminatus, the resemblance seemed to me remarkable in many essential points."¹

In the discussion that followed the reading of the first paper, Dr. Taylor expressed himself as sceptical in regard to that form of lupus erythematosus described by Kaposi. He looked upon the case reported as "a sub-acute infective process."

Drs. Greenough and Shepherd seemed to regard the general symptoms as incidental and without direct causal relation to the lupus erythematosus.

In this connection it will be profitable to note briefly the remarks of Professor Leloir (*Jour. des Maladies Cutanées et Syphilitiques*, May, 1891)² on the question of the relationship between lupus vulgaris and lupus erythematosus. He maintains that the two affections are absolutely distinct clinically and pathologically; but he states that there is a form of lupus vulgaris which possesses close clinical affinities to lupus erythematosus.

¹ Journal of Cutaneous Diseases, loc. cit.

² Abstracted by M. Brocq for the Journal of Cutaneous and Genito-Urinary Diseases, Jan., 1892.

This erythematoid lupus vulgaris occurs usually on the face, is unilateral, rarely symmetrical, and is mostly limited to one patch, although there may be two or three similar lesions.

The patches are of a bright congestive red, disappearing partially upon pressure.

The surface of the plaque is marbled over by a meshwork of a brownish or violaceous red, and in the middle of the meshes small whitish or yellowish spots are visible. At the periphery of the patch more especially are to be seen, here and there, fine scales or small lamellated crusts: and sometimes also fine vascular arborizations. The patches are slightly raised at the borders, and as a result of interstitial resorption are depressed in the centre.

It will therefore be seen that these cases have a striking clinical likeness to lupus erythematosus, but it is said that if the skin be stretched when the disease is extending the characteristic yellow miliary nodules of lupus vulgaris may be detected, although sometimes not until the disease has undergone a certain period of evolution. On the other hand, declares Professor Leloir, a never failing characteristic is the deep infiltration upon which the plaque rests, and when it follows the march of lupus vulgaris sclerosus this induration is nearly cartilaginous.

This erythematoid lupus vulgaris is tenacious and difficult to cure, but it never ulcerates. The author looks upon it as really a local tuberclosis. M. Brocq commenting upon Prof. Leloir's paper says that it confirms the views expressed by himself more than five years ago.¹ Basing his opinions upon clinical data he divides the affections hitherto grouped under lupus erythematosus into two principal varieties: 1. The centrifugal symmetrical erythemas, or symmetrical wandering lupus erythematosus, the nature of which is still unknown.

2. The fixed lupus erythematosus, which he considers as being varieties of cutaneous tuberclosis.

The two cases that have come under my observation are remarkable in many particulars, and in a general way resemble nothing so much as the lupus erythematosus disseminatus of Kaposi, which latter affection is included by Brocq in his class of *lupus érythémateux fixe*.

Whether these cases were really examples of a local tuberclosis of the skin it is impossible at present to say, but objectively they represented in the beginning the ordinary features of what is called lupus erythematosus as we usually see it.

¹ See especially Brocq, *Traitement des Maladies de la Peau*, Paris, 1890, p. 543.

although in their after careers they departed widely from this type.¹

The further discussion of this subject from a theoretical standpoint is a temptation difficult to resist, but I shall content myself with the foregoing presentation of the clinical data, feeling that the time has not yet arrived for any dogmatic statements on a question that both deserves and demands much greater study.

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A CASE OF PAGET'S DISEASE TREATED WITH FUCHSIN.

BY

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IT is only recently, comparatively speaking, that the aniline dyes have been drawn into the field of therapy and that several of them have been made the subject of more or less extensive experimentation. Pyoktauin especially had been recommended for suppurative processes, etc., and has been very widely used, but though its value has been demonstrated in my hands in some cases, yet the results obtained from it were not such as could not have been obtained, just as, if not more readily from other remedies, and at any rate, with a great deal more satisfaction to the patient, who objected strenuously to the staining and ruining of bed and other linen, and that notwithstanding, all precautions possible were taken. Among others, pyoktauin has been used by me in various ulcers of the legs, in certain eczematous and in suppurative processes due to local infection on various portions of the body, but especially of the fingers. In the ulcers, whether varicose or the product of broken down syphilitic gummata, the effects observed were a cessation in the formation of pus, the ulcerations became clean, the offensive odor would be removed, but no further progress would be made. Granulations and cicatrization did not take place, there would not be any change in the subjective sensations

¹ M.M. Hallopeau and Jeanselme have published a case of true lupus erythematosus of the face, occurring coincidentally with pulmonary tuberculosis, as shown by autopsy. Quoted by Brocq.

of pain or itching, and recourse would always have to be had to other remedies. Similar results were obtained in the other diseases, except that the effects on eczema were for the most part objectionable, owing to the production of irritation and increase in the objective symptoms. Pyoktanin, therefore, giving results not in any degree equal to many other remedies and being objectionable, furthermore, on account of its staining properties and appearance, it was set aside, and in its place fuchsin was tried by me. The same objections of staining, color and appearance pertain to fuchsin as to pyoktanin, but it developed qualities of value which were not possessed by the latter. Not only did the fuchsin stop suppuration and clean an offensive ulcer, but it especially quieted the itching or the pain due to the existence of the morbid process, and though not particularly furthering healing, yet it did not interfere with the formation of granulations and it also seemed to possess in a certain degree the power of causing cornification of a soft epidermis layer, though its effects in this line were in no particular commensurate with those produced by ichthyol and other reducing agents. The fuchsin likewise exerted very favorable action on eczemas of parasitic origin, especially those associated with a varicose condition of the legs, causing an entire disappearance of the morbid symptoms, but in eczema of other nature, the results from its use were either unfavorable—increase in severity of the disease—or were limited to relief of the subjective disturbances.

The aniline color was also used by me in epitheliomata of various clinical forms, both as local applications and also hypodermically into the affected skin. The results obtained were practically speaking *nil*, though the pain and offensive odor due to the secondary sloughing of some, which were on the trunk and extensively ulcerated from previous neglect and maltreatment, were greatly relieved, if not entirely removed. In one case, however, of extensive Paget's disease affecting the breast, most surprisingly good results were obtained, as may be seen from the following description, and they have therefore appeared to me worthy of mention.

Private Practice. Patient, age 60, was seen by me May 23, 1891. Her general health was poor, she was greatly emaciated, had a double cardiac lesion (mitral and aortic), and in recent years had had several serious illnesses. The disease, for which I was consulted, was situated on the left breast and had begun four years before on the nipple and areola as a slight scaliness and redness. These symptoms had extended slowly,

the surface affected becoming gradually larger, moisture and exudation appearing in places and being followed by crusting. Subjective sensations were absent at first and did not become manifested until the disease had existed a year, but since then itching and burning had been severe and most distressing. She had been continuously, for more than a year, under treatment, but the progression of the process had been a steady one, and when I saw the patient a most extensive surface was occupied by the morbid symptoms. The breast was atrophied and, in fact, owing to the almost entire absence of panniculus adiposus, scarcely perceptible, the nipple was completely effaced, though not drawn in. The diseased surface was irregularly circular in shape and occupied a space bounded above by the inferior border of the third rib, below by the lower border of the seventh rib, while laterally it began one inch from the edge of the sternum and extended a half inch beyond the axillary line. The border of this area, which was more or less polycyclic, was most sharply defined and abrupt, slightly elevated and giving the impression to the finger of a marked infiltration. For a variable distance inside the border, the diseased surface was pale yellowish in color, waxy and somewhat translucent in appearance, but then a gradual merging occurred and the symptoms gave place to a bright red, scaly and then finely granular raw, moist area, which was of a dark red and presented here and there superficial exuding excoriations and ulcerations of all sizes. The severest symptoms were in the central portion for a distance of perhaps two inches around the nipple, then came the scaly, crusting, but dry superficies, and finally the pale, waxy area already spoken of, that is, three more or less clearly marked zones could be distinguished, all of which, however, were irregular in outline and variable in extent and not by any means definite in arrangement. The scales were epidermic in character, but many small lamellæ were clear yellow and composed of the dried-up exudation and a few cornified epithelial cells. A little pus was seen on some of the excoriated and ulcerated places. A careful examination showed absolutely no tumor in the breast and no glandular implication whatever. The patient complained intensely of the itching and soreness, and stated that the surface felt stiff, so that she could not straighten herself up.

Owing to the general health and systemic condition of the sufferer, as well as the extent of the affected surface, operative treatment was not only out of the question, but absolutely

objected to, and, therefore, it was necessary to have recourse to palliative remedies only. The diseased area being considerably irritated from previous applications, a mild ichthyol ointment (grs. iii ad ℥ i) was first used and it was productive of excellent results in quieting the inflammatory symptoms, the itching and the burning. For some length of time it gave comparative ease and comfort, its strength being increased to one and one half per cent. but progression of the disease took place slowly and steadily along the upper and outer border. Various applications were then tried, but none were productive of good results, only increasing the subjective discomforts enormously, and finally, July 15, 1891, a fuchsin ointment was ordered and it gave admirable results from the very beginning.

There was an immediate cessation of the itching and soreness, and though from time to time these symptoms have returned, yet they have been slight in degree and of short duration, and have developed only whenever any change in the dressing was attempted. The patches, which were raw and exuding, have also healed over, and the entire inner surface has become transformed into an area, still red, but covered over with a thin epidermis coat, cracked and fissured in places, but with only a few points of exudation here and there. The characteristic granulated appearance has disappeared and small patches may be seen which are white and apparently cicatricial in character. These changes did not of course take place immediately after the fuchsin was first applied, but have occurred gradually in the course of the months that the treatment has been kept up, but one fact was apparent from the start and that is, that *progression* of the disease *entirely ceased* and not a line of further extension has since occurred. On the contrary, a space of from a half to an inch all around has apparently undergone involution, the redness, the infiltration, the scaling, have completely disappeared and been replaced by a more or less pigmented surface. There are, in addition, many small patches which are white cicatrices, and the markedly affected area has thus become much reduced in size. No tumor has formed in the breast as yet, the lymphatic glands are not affected. It was unfortunately impossible to obtain any portion of the diseased area for microscopic study, except the squamæ, and I omit mentioning the features presented by these, for the reason that they were neither definite nor of any particular importance.

The affection, of which this case was an example and to which the name "Paget's disease" has been attached, was first

described in 1874 by Sir James Paget,¹ and since then has formed the subject of investigation by many observers, among whom may be mentioned Duhring,² Morris,³ Thin,⁴ McCall Anderson⁵ and others, and more recently by Wickham,⁶ who attributes its existence to the presence in the milk ducts, etc., of "psorosperms." Paget's cases were all women between 40 and 60 years of age and in them the disease was limited entirely to the nipple and areola. Though resembling in certain particulars an eczema, yet the process showed the peculiarity in every case of being followed in from one to two years by the development of a cancer in the breast. Since Paget's first paper called attention to the affection, many cases have been seen which, however, differed in certain particulars from those recorded by him, though in regard to its ultimate result—the development of cancer—there has not been any deviation. Instead, however, of the disease being so limited in extent, Jamieson⁷ has reported a case in which the entire breast and axillary region were implicated, and as mentioned, my patient presented a diseased area nearly as extensive. Besides this, the duration of the process on the skin before the formation of cancer, has also been found to vary within wide limits. Jamieson's case had remained superficial for twenty years, Duhring records a case which had lasted ten years, Morris one of six years, so that the length of time that the symptoms have existed do not form an important item in the diagnosis. Neither can we say that sex absolutely does, since Crocker⁸ has had under his care a man, aged 47, who on his scrotum presented a condition precisely similar to that observed on the nipple and areola in women, and which became cancerous at the end of two years. When the affection is seated on the nipple and areola, as is, however, the rule, the importance of a correct diagnosis is certainly very evident in view of its tendency to result in cancer, and the disease from which it must, we might say, always be differentiated, is eczema affecting the same locality. McCall Anderson has tabulated the points of difference between the two, and I cannot do better than repeat the statements made by him.

¹ Paget, St. Bartholomew's Hosp. Rep., 1874.

² Duhring, Ann. Journ. Med. Sci., 1883.

³ Morris, Med. Chir. Trans., 1880.

⁴ Thin, Brit. Med. Journ., 1880.

⁵ McCall Anderson, Treatise on Skin Diseases, 1887.

⁶ Wickham, Ann. de Dermat. et de Syph., Jan. and Feb., 1890.

⁷ Jamieson, Diseases of the Skin, 1889.

⁸ Crocker, Diseases of the Skin, 1888.

Paget's Disease of the Nipple.

1. Occurs especially in women who have passed the climacteric.

2. Affected surface, in typical cases, of brilliant red color, raw and granular looking after the removal of crusts.

3. When grasped between the thumb and forefinger, superficial induration often felt, as if a penny were laid on a soft elastic structure, and grasped through a piece of cloth.

4. Edges of eruption abrupt and sharply cut and often elevated.

5. Very obstinate and only yields to extirpation or other treatment applicable to epithelioma in general.

Eczema of the Nipple and Areola.

1. Occurs especially in women earlier in life, and particularly during lactation or in persons laboring under scabies.

2. Surface not so red and raw looking, and not granular but often punctated.

3. Soft and no induration.

4. Edge not so abrupt and certainly never elevated.

5. Although sometimes obstinate, yields to treatment often applicable to eczema.

As far as the pathological condition in Paget's disease is concerned, the general opinion is in favor of regarding it as of a malignant nature from the first, but according to Wickham it is a chronic affection of the skin due to parasites belonging to the order of psorosperms, which parasites appear to have a direct influence in the subsequent epitheliomatous development. Not having any material for microscopic study at my disposition, I do not intend to discuss the pros or cons of Wickham's conclusions, though personally holding the opinion that the bodies called psorosperms and found not only in Paget's disease but also in molluscum contagiosum (Neisser), in certain epitheliomata (Malassez), in the affection "Psorospermose folliculaire végétante" (Darier) etc., are as yet far from being proved to be coccidia and at least in molluscum ought but degenerated epithelial cells, in which disease they have been seen and studied by me. Still I mention particularly that the coccidia are held by some observers to be the cause of these processes on account of a strange fact, which occurred in connection with my patient, one which may be interpreted according to any one's particular opinions. In May, 1891, Miss L., a trained nurse, took charge of my patient and has remained with her ever since, dressing the diseased surface two or more times daily and being continually in more or less intimate contact with her. Miss L. was not robust, but enjoyed fair health, and with the exception of a little acne from time to time had never had any skin disease. About

two months after taking charge, there began to develop on the face typical lesions of molluscum contagiosum and a considerable number appeared on the forehead, cheeks, chin, nose and eyelids. They did not appear at once, but gradually and successively and some became as large as a pea. Treatment was not undertaken by me for some time, in order to allow the lesions to attain full development and to prevent any possible error in diagnosis. When removed, they were under the microscope typically molluscum contagiosum.

As I have just said, I leave the interpretation of this occurrence to every one's personal bias. Those who see coccidia in the bodies resembling psorosperms, and attribute to their presence molluscum contagiosum and Paget's disease, will certainly regard the fact mentioned as an instance of contagion, the difference in lesion being due to the difference in soil in which the implantation has taken place; others, who consider these bodies as being only degenerated epithelial cells, will consider it as a coincidence. Among these latter, I would include myself, though being ready to accept the opposite view, should sufficient proof be brought forward to support what appears to me to be so far, conclusions founded upon resemblances, but not facts. The fuchsin, which gave such good results in my case was used in the following manner. The first prescription was R. fuchsin, grs. two and a half; Lanolin \mathfrak{z} i; Aq. Rosæ \mathfrak{z} vij. The lanoline and rose water when beaten up formed a base of admirable consistency and the fuchsin colored it a beautiful dark pink. Care must, however, be taken to obtain chemically pure fuchsin, so as to avoid the admixture of arsenic frequently present in the commercial one. In using the ointment, it was spread an eighth of an inch thick on stout linen, cut so as to accurately cover the surface affected, and over this a thin layer of absorbent cotton was laid. This dressing remained perfectly in place, without the aid of a bandage, and it was renewed generally twice daily. The percentage of the fuchsin was changed from time to time and grs. iii, iv, v and finally vii ad \mathfrak{z} was added to the base. It was found, however, that grs. v was as high as could be used, the ointment containing grs. vii having been quite irritating and it having caused a dermatitis, which required several weeks to quiet down. The fuchsin was also used in combination with oil of sweet almonds. In this medium only a portion of it dissolved and the remainder was held in suspension. When very finely divided and carefully and thoroughly rubbed up with the oil, the fuchsin produced

effects, but not such as warranted its use. It caused considerable pain and the dressing sticking to the surface gave much discomfort.

Notwithstanding the admirable results obtained in this case, I do not think that a specific curative effect can be ascribed to fuchsin in these forms of disease, or at any rate, I would not make that conclusion unless it was found to exert such an influence in a number of instances. I do not, therefore, suggest its use as a curative agent, but as a remedy, which possessing analgesic properties, gives ease and relief from the suffering experienced by those affected with such diseases as Paget's and who for some reason or another cannot undergo the radical treatment, which is unquestionably indicated by the nature of the process. I unhesitatingly believe that operative interference is absolutely necessary in all malignant affections, but as it happens to all to meet with cases in which such means of treatment cannot be made use of, perhaps a certain amount of benefit may be obtained from the fuchsin.

7 West Thirty-first Street.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

Plasters in the Treatment of Skin Diseases.—Dr. Hallopeau, in a report addressed to the Société Thérapeutique, recalled the fact that the first attempts to employ plasters for the methodical treatment of skin diseases were made by Vidal, at the time that he was Physician to the St. Louis Hospital. Thus it was a long time ago that he had manufactured his red plaster (minium. 2.50, cinnabar 1.50, diachylon 26), which gives such good results in the treatment of certain dermatoses, and of ecthyma in particular; his plasters of cod liver oil, which are excellent in prurigo; his white plaster, which succeeds in certain cases of eczema, particularly in chronic eczema of the lower extremities. Then came the researches of Unna of Hamburg, who has caused to be manufactured by Beiersdorf a whole series of plasters of the most complete kind, and who has given to this kind of cutaneous medication the whole importance which it is well known to possess. It must be remembered that for a number of years France has remained behind in this regard, but since the products of Hamburg cannot enter France, we have been forced to manufacture similar preparations. This is what two of the most intelligent of the Parisian pharmacists, Messrs. Cavallès and Vigier, have attempted. Thus, at the present time, we have at our disposal new plasters of the most satisfactory kind. Nothing has been neglected in their preparations. As tissue on which the plaster mass is spread, Mr. Cavallès

employs an anti-septic cloth of rubber. Mr. Vigier uses a *batiste* rendered impermeable by immersion in linseed oil, containing 5 per cent. of boric acid in suspension, with or without the addition of resin.

But the most important point by far is, without denial, the question of the excipient with which the active substance is incorporated. The excipients first employed by Unna contained gutta percha and caoutchouc dissolved in benzine or oleate of alumin; and he also resorted to an excipient composed in large part of lanoline, to which he added only a small proportion of gum elastic.

Messrs Vigier and Cavaillès have for several years already been working in this direction, and they have prepared with lanoline, to which was added a sufficient quantity of elastic gum dissolved in benzine, satisfactory plasters. Nevertheless, the diachylon plaster can also be employed as an excipient in many cases, and particularly in mercurial preparations, on condition that it has been recently prepared with fresh resins and oil.

The simple plaster of the French codex, to which is added a little dextrine, can be reserved as excipient for certain substances, particularly oxide of zinc. At any rate, this is what can be said, in a general way, on the use of plasters in France. The plaster of oxide of zinc is prescribed with success in certain cases of eczema which are not very moist, or in certain eczemas of pruriginous nature, which must be kept free from all friction and all traumatism. Cod liver oil plasters constitute the best topic with which we are acquainted for prurigo of Hebra. In case they do not sufficiently calm the itching, there could be incorporated with them a little naphthol or menthol. Plasters of salicylic acid, 5 per cent. or 10 per cent., are quite efficacious in hyperkeratoses, but it is most frequently necessary to combine them in this case with green soap, pyrogallol or other plaster. The red plaster of Vidal (see composition above) gives good results in the treatment of ecthyma, impetigo, furuncles, suppurating folliculitis, dry eczemas, etc. We must still mention the phenicated plaster, mixed with the biniodide, and the ichthyol and sulphur plasters in acne; the simple resorcine or resorcine and creosote, and the salicylic and creosote plasters in lupus; the oil of cade, pyrogallie and chrysoplumic plasters in psoriasis, and the chaulmoogra oil plaster in leprosy. I will not here insist on the advantages offered by plasters over other topical applications in certain cases. They furnish isolating and protecting dressings for the diseased parts, preventing the contact of irritants, while they prevent the propagation of contagious germs and auto-inoculations. They may act in provoking absorption of medicaments when applied over an extended area, as the results obtained by Dr. Quinquand have proven in the treatment of syphilis with his calomel plaster.

Treatment of Scleroderma in Bands by Electrolysis—On January 14, 1892, I presented at the French Dermatological Society a patient affected with scleroderma in bands of the right arm, which I had treated by electrolysis. The affection was progressing at the time the electrolysis was begun, and from the time of the first seance the extensive march of the plaque was arrested. The action of the electricity seemed to me then, in this case, to be incontestable. A fact well worthy of note is that the lower portion of the plaque, that on which I made most all the punctures with the electrolytic needle, remained the longest infiltrated. It is true that it was the

thicker part and the least movable, but even in taking account of this circumstance, its amelioration was much less rapid than that of the upper part of the band. It even remained almost nul as long as I made the punctures perpendicular to the surface of the integument, and thus exposed myself to complicating the sub-cutaneous layers. On the other hand, it went forward with a certain rapidity as soon as I introduced the needle into the derma in an oblique manner, so as to respect the sub-dermic tissues.

This peculiarity seems to me to have a real importance, for it seems to show, first, that we must look out for the sclerotic action of electrolysis in certain cases, and particularly in cases of scleroderma in plaques; that we must in these patients endeavor to limit as much as possible the action of the electrolytic needle to the sclerotic tissues alone, and consequently introduce the needle very obliquely, almost parallel to the surface of the skin; second, that the electrolysis acts in these cases in quite a mysterious manner, that it can act at a distance, and that it does not act at all by its destructive power; we must not, therefore, endeavor here to destroy, as in the treatment of hypertrichosis, for example; but, on the contrary, we must try to obtain the electrolytic action with the minimum amount of destruction possible; feeble currents must, hence, be passed, and the electricity must not be allowed to act but for a relatively short time at each point, and multiply the punctures at each sitting. We can thus arrive at the application to the plaque of the same sum total of electricity at each sitting, while causing the least possible amount of destruction of tissue.

Trichophytosis of Regions Covered with Thick Corneous Epidermis.—

Localization of trichophytosis upon the palms and foot soles is not yet of very common occurrence. Dr. Djelaleddin Moukhtar (of Constantinople) has just studied the question in two communications of much interest, made to the French Dermatological Society. These cases present themselves objectively under the form of raised up epidermic lesions, having the aspect of vesicles of the size of small lentils, not much distended, of a yellow color, little or not at all surrounded by an erythematous zone, and containing a clear fluid. They resemble at first the lesions of dysidrosis. Then these epidermic elevations burst in the centre, disclosing a small surface of a violaceous red color surrounded by a little collar of corneous epidermis, peeled up and dry, beyond which is seen an erythematous circle of a yellowish red and quite limited. This epidermic elevation enlarges progressively by the union of the separate elements, and invades the palm of the hand, the sole of the foot and the neighboring parts of the fingers or toes. At its period of full development the lesion is constituted by a plaque of polycyclical contour, over which the skin is red, furfuraceous, and covered at its periphery with horny scales, presenting the aspect either of a tertiary circinate palmar or plantar syphilide, or of erythematous or pemphigoid elements. Microscopic examination of the horny masses, taken from several points of the border of the lesions, permits the diagnosis (with the aid of potassa) of mycelian filaments of the trichophyton tonsurans. It is thus necessary in future, when we have before us a polycyclic dermatosis of syphilitic aspect, unilateral, of the palm of the hand or foot sole, not to hasten to the conclusion that it is a tertiary syphilide, but to first practice an histological examination and search in the horny scales of the border of the patch the trichophyton tonsurans.

Phthiriasis of the Eyelids.—Following a communication which Dr. Julien made to the French Dermatological Society upon phthiriasis of the lids, a number of similar cases have been published in France, which seems to prove that this localization of the *pediculus pubis* is less exceptional than was at first thought. All these authors are in accord in recommending as the best method of treatment the patient and careful extirpation of all the parasites and their eggs with dressing forceps, by which means, with a little cleverness, a single seance suffices.

Mycosis Fungoides.—During the past few months the presentations of patients with mycosis fungoides have been multiplied in a singular fashion at the French Dermatological Society. It results from these numerous communications that it is a disease of protean type, being capable of presenting clinical aspects of the most diverse nature, and nearly always unrecognized at its incipency, in the form called typical, which is the most common. One must be on his guard concerning rebellious pruriginous eczematous eruptions, accompanied by a thickening and infiltration of the derma, and which resist ordinary general and local medication which succeeds in simple and lichenoid eczemas. Several patients who had previously been treated in the St. Louis Hospital for rebellious dermatoses, which had been called lichen or lichenoid eczema, have returned later on with incontestable lesions of mycosis fungoides, which had arrived at the period of tumor formation. Unfortunately, even if we begin to learn better how to diagnose and track this affection, we do not yet know how to treat it. The exact appreciation of the various therapeutic methods employed is rendered more difficult by the observation that this affection often presents periods during which the symptoms notably diminish in intensity, and may even disappear. The subcutaneous injection of arsenic, of arseniate of soda in particular, have at times appeared to me to give some results. Dr. Quinquaud has quite recently proposed to make interstitial injections of aristol into the tumors. In one case I obtained quite good momentary effects in acting upon the tumors with a 10 per cent. pyrogallie pomade, following the recommendations of Dr. Vidal so as to cause ulceration, and then dressing the wounds thus obtained with a liniment of oil and lime water containing 10 per cent. of aristol. In one case in which the diagnosis made by a number of dermatologists was between mycosis, with tumors from the onset, and sarcoma of the skin, I saw results from the injection of camphorated naphthol, which were made into the body of the tumors themselves so as to produce mortification, and then the wounds thus caused were dressed with camphorated naphthol and covered with antiseptic cotton. Although the itching caused by this medication was very severe, the patient was able to continue them, and he succeeded in this way in causing the gradual disappearance of all the tumors. It is none the less true that we are still seeking in France a medication which will be really efficacious in this affection.

Treatment of Syphilis by Europhen.—Following Eichhoff, Petersen, etc., Dr. Gaudin had experimented with europhen (diodide of isobutylorthoeresol) in the treatment of syphilis. He employs a solution in oil in the proportion of five grains of europhen for a hundred cubic centimeters of oil of sweet almonds, injecting up to five cubic centimeters at a time of this solution by

means of the Birlureaux injector (see one of my previous letters). There is a great advantage in employing oil as a vehicle in europphen : in fact, it dissolves a large quantity of the drug, and it is well known that oil, employed as a subcutaneous injection, is not painful and does not produce abscesses of the skin. The conclusions of the author are as follows : The subcutaneous injections of europphen in oil are well borne, although they are at times a little painful ; they never provoke accidents, either local or general ; they constantly ameliorate the syphilitic manifestations of the tertiary stage, although he cannot state that he has obtained by this means complete cures ; they seem to act as quickly and as well as solutions of gray oil or of sublimate ; they can thus be employed when we wish to produce a prompt and energetic action in cases of severe symptoms. However, the author recognizes the fact that these injections have little effect on the secondary manifestations in course of evolution. We may thus ask if we can really count upon the efficacy of this treatment in syphilis.

Gonorrhœal Rheumatism in the Infant.—Dr. Beclère has just called attention, in the *Revue Générale de Clinique et de Thérapeutique*, to a complication of gonorrhœa little known about till now, gonorrhœal rheumatism in youthful age. In less than a year he has observed two cases, one in a little girl of five and a half years, the other in a still younger subject, a baby of twenty months. In the first of these little patients the origin of the contagion could be definitely established ; the child had been the victim of an apprentice of sixteen or seventeen years of age, who had a gonorrhœa of some standing. The child was treated by immobilization and compression with cotton, and was cured in fifteen days of its arthritis, but it preserved for some time a certain amount of muscular atrophy of the whole left upper extremity (arthritis located in the left wrist), which gave way to continuous currents ; the vulvo-vaginitis disappeared after lotions and injections of bichloride. Thus, in the first case, nothing is plainer ; the child was contaminated by a subject of the disease, had a blenorragia of which the origin was known, followed by a rheumatism of the wrist. It was not the same in the author's second case ; here there was a twenty months' old infant presenting the right tibio-tarsal articulation in a swollen, rosy, painful condition, together with a thick, purulent vaginal discharge and a drop of pus exuding from the meatus urinarius. It was impossible to get precise data concerning the origin of this running, but the aunt of the infant acknowledged that the little girl slept with her mother, who had for several months suffered from a greenish vaginal discharge. The mother could not be examined. The author thinks that in this case we have to deal with a gonorrhœa insontium accidentally transmitted by the mother to the daughter. These cases, we repeat, should call attention of practitioners to the fact that, when they observe in infants of a tender age articular manifestations having the clinical aspect of gonorrhœal rheumatism, age does not constitute a sufficient argument to make us reject the diagnosis. On the contrary, such a case should make us think of this possibility, and cause us to make a thorough examination of the genital organs.

PARIS, April, 1892.

DR. L. BROQUÉ.

INJECTION OF FLUIDS INTO THE BLADDER WITHOUT A CATHETER.

To the Editor of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES:

In your May number I notice a selection from a continental periodical in which the "author reports a series of experiments which conclusively show that fluids under ordinary conditions cannot be forced beyond the compressor muscle into the deeper urethra and bladder by means of an ordinary urethral syringe." Also that, "further experiments proved that if after thoroughly emptying the bladder the patient was placed upon his back and the nozzle of the irrigator or fountain syringe was introduced within the meatus, and the irrigating reservoir raised to a height of two meters, the pressure of the fluid would soon overcome the resistance offered by the 'cut-off' muscle and flow freely into the bladder."

In connection with this I would state a fact, if not generally known it should be, that by asking the patient to strain as if to urinate a little at the time of force being applied, any ordinary urethral syringe is sufficient to convey fluids into the bladder, and a fountain syringe with the reservoir placed at less than one metre above level of compressor muscle works nicely with the same procedure.

The principle upon which this is accomplished is evidently that the compressor muscle is not a gauge by which the size or force of the stream is regulated, but a valve which allows a full stream or none at all; and that the "fountain head or force of the stream from the bladder depends alone on the muscular layers of bladder wall.

Then in order to pass a stream into bladder by means of a nozzle introduced within the meatus, it only becomes necessary to instruct patient to strain as if to pass a very slow stream or to "strain a little." This opens the "valve" and only a little *vis a tergo* has to be overcome. And after a little practice the patient seems to acquire the ability to relax the vesical sphincter without exciting any expulsive action from the bladder.

In this procedure it matters little what position the patient takes. It can be employed so easily that a catheter in most cases is worse than useless.
C. F. BENNETT, M.D.

304 West Fourth Street, Waterloo, Ia.

VENEREAL DISEASES AND HOTEL SERVANTS.

To the Editor of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES:

DEAR SIR:—

"Where ignorance is bliss, it is folly to be wise." It is well, perhaps, not to know that when you take your "outing" this summer at Saratoga or Newport, that the man who serves you with delicate viands, and afterwards washes the dishes, has perhaps preputial chaneroids, or is taking daily doses of "Mistura Lafayette."

On the 1st of June there is a perfect exodus from Washington, of colored waiters, who during the season are employed at the various hotels, everywhere in New England, and along the Atlantic sea-coast.

This has been my observation in private practice, and as chief of a very

large dispensary service, I have been urged to call the attention of the profession to this fact.

A good many also have constitutional syphilis, and the mucous patches in their mouths, may be the cause of the spread of syphilis to an alarming degree. Something ought to be done. If necessary every servant before being employed, ought to be examined by a competent syphilographer.

Sincerely yours, etc.,

HENRY A. ROBBINS, M.D.

WASHINGTON, D. C., June 7, 1892.

Selections.

The Bacteriology of Epidemic Eufoliate Dermatitis. J. S. R. RUSSELL. (*Brit. Journ. of Dermat. April, 1892.*)

Dr. Russell examined the bacteriological side of the disease in the following manner:

1. Portions of the skin were studied microscopically for micro-organisms.

2. Artificial nutrient media were inoculated with the blood from patients during life and also after death; inoculations were also made from the under surface of epithelial flakes.

3. From these, pure cultures were subsequently made on gelatine, agar, and potato. Cover glass preparations of these pure cultures were stained; animals were inoculated with the organisms obtained from the pure cultures.

4. Controlling experiments were made by staining sections of the skin of individuals who had not been affected by the disease, and artificial nutrient media were inoculated with blood from the cavities of the heart of persons who had died from other diseases.

Sections of the skin of patients affected with the dermatitis were stained in various ways and showed the prevailing micro-organism to be a diplococcus though a few cocci were also found and once a single chain of streptococci. The diplococcus was found especially in the deeper layers of the skin.

Cultivations made from the blood during life were in one case, negative; in another, septic organisms were obtained; in a third, the staphylococcus pyogenes aureus, and in a fourth, a negative result. Cultures of blood taken from the cavities of the heart after death showed in stained cover glass preparations a diplococcus identical with those in the skin. In one instance, the blood swarmed with septic organisms, but R. considered this to be probably due to accident in preparation. Cultures made from the under surface of epithelial flakes gave the same diplococcus, only, in one case it was absent. An emulsion of a pure culture and distilled water being made, 2 C. C. was injected subcutaneously into the abdominal wall of one guinea pig, and 4 C. C. in another. No symptoms whatever, either local or constitutional. The ear of a rabbit was scratched and inoculated with the same result. Again

the same result after injecting subcutaneously 4 C.C. of broth culture in another rabbit and also in a young dog.

The results of the experiments made for control were that no diplococcus was found. The micro-organism was a diplococcus almost as large as Friedländer's pneumonia-diplococcus. Its segments were ellipsoid or rod-like and a capsule was not demonstrable. It was easily stained by means of various coloring matters, but best by an alcoholic solution of gentian violet. It was not decolorized by Gram's method. It grew readily on various nutrient media, most luxuriantly at a temperature of 20 C. Its cultures do not liquefy gelatine and it requires oxygen to flourish.

In its characteristics and the conditions under which it is found, the diplococcus resembles the staphylococcus pyogenes albus more closely than any others, but it differs from it in being a diplococcus, in not liquefying gelatine and in not producing a specific effect in animals with the same ease and certainty.

Dr. Russell concluded that the constancy of the presence of the diplococcus in connection with the epidemic skin disease prevents its being considered as accidental. There are ample grounds suggesting an etiological relationship, but in as much as a specific effect on animals was obtained only once (by Dr. Saville) the diplococcus cannot be affirmed to be the cause of the disorder.

GEORGE T. ELLIOT.

Further Observations Concerning Carcinoma—Encapsulation. J. STEINHAUS. (*Virchow's Archiv*, Band 127, H. 1, with 2 Plates.)

S. has examined most carefully a carcinoma cutaneum of the sole of the foot in regard to those bodies which Pfeiffer and Wickham have regarded as parasites existing in the epithelium and epidermis in cancers of the skin, and he has shown in his plates the various steps in their formation, which lead him to entirely different conclusions.

In a cell nest in process of formation, Steinhaus shows that there is a more or less centrally situated cell round which the neighboring ones are concentrically arranged. Usually several of these latter, but sometimes only one suffices for the encapsulation of the central cell which then appears to lie in a ring which having a peripheral flattened nucleus is united to the former by long radiating threads. Degeneration often occurs in the invaginated cell, the nucleus undergoing involution until it disappears entirely, the fibrillation of the protoplasm being seen to extend up to the nucleus. The cell in this manner finally becomes transformed into a structureless homogeneous body, which except that its formation had been traced, would suggest strongly in appearance an encapsulated parasite.

Another form of encapsulation was also observed, which Steinhaus thinks Pfeiffer and Wickham likewise took for parasites, but of which he observed the transitional stages from ordinary carcinoma cells. In a group of these latter, the central cells were evidently hypertrophied, the nuclei and nucleoli twice as large as the others, the cell body itself enlarged and the intercellular prolongations represented by long threads. At the periphery of these cells, the protoplasm becomes homogeneous and as it progressed, there resulted an apparent multi-nuclear giant-cell; or the protoplasm was represented by a homogeneous ring, the degenerated nucleus being seen as though lying in a vacuole. The changes which take place in the nucleus are either

chemical in nature and shown by a progressive diminution in staining power, or its structure being especially attacked, the chromatin is massed together and represented by a fragment. Both forms result in complete disappearance of the nucleus.

The features mentioned may attack single cells or groups of cells. In the former case, a vacuole is seen lying between the other carcinoma cells and containing a rounded homogeneous body enclosing a fragment of chromatin; in the latter, the vacuoles are larger and contain several similar bodies. Steinhaus regards the changes as the result of the extensive cornification, which occurs in carcinoma cells, the intermediary stage seen in normal epidermis in the formation of the eleidin granules being absent. He does not deny the possibility of parasites becoming encapsulated in carcinoma cells, but the encapsulations observed by him are certainly in his opinion not parasites.

In this connection it may not be out of place to recall the fact that Dr. H. G. Piffard demonstrated by an entirely different method that the cells forming the epitheliomatous "pearls," and in mollusum contagiosum, the molluscos bodies, were rete cells, which had undergone corneous degeneration. (JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES, Jan., 1891.) He used polarized light and found that the "pearls" and also the bodies called psorospermus in mollusum reacted in an identical manner as the stratum corneum in normal skin, and he concluded from that that these bodies were not animal parasites, but simply rete cells undergoing a species of corneous degeneration. Steinhaus, corroboration of that conclusion for epitheliomatous pearls; A. B. Macallum's admirable work on mollusum contagiosum (JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES, March, 1892), undoubtedly deal severe blows to the psorosperm theory in connection with these forms of cutaneous disease, and certainly the burden of proof rests upon the adherents of the belief that the bodies found are coccidia. When their conclusions of these are based more upon facts than upon general resemblances, when they bring forward the proof that real psorosperm have been cultivated from the diseases mentioned, as well as from Paget's Disease and the psorospermose folliculaire végétante of Darier, then the connection of these parasites with the various pathological processes will be more supposable than they are at present, though the actual and absolute demonstration of the fact will be made conclusive only by successful inoculation experiments. None of these important steps have, however, so far been done, but on the contrary, the investigations made all tend to discredit the belief that the bodies seen are coccidia at all. A pertinent question also suggests itself that if the psorosperm-like bodies in epitheliomatous pearls and in mollusum contagiosum are the result of corneous degeneration, why are those seen in Paget's disease and in Darier's not due to the same process of degeneration, inasmuch as differences in resemblance between those found in each one of these cutaneous affections have not been observed or even hinted at?

GEORGE T. ELLIOT.

The Influence of Intra-Renal Tension on the Function of the Kidney.

PROF. GUYON. (*Annales des Maladies des Organes Génito-Urinaires*, March, 1892.)

In this communication the author gives the results of some experiments conducted by himself, with the assistance of Drs. Albarran and Chabrie, with

a view to determining the effect of sudden total obstruction of the ureter upon the intra-renal tension, and the quantity and quality of the secreted urine. The experiments consisted in connecting the ureter of a healthy dog with a *manometre*, and noting the height to which the column of mercury would be driven by the pressure of the accumulated urine; the variation in the amount of urine secreted under these conditions, and the changes in its chemical composition; and also the anatomical changes which took place in the renal tissue.

The conclusions reached were briefly these:

That the intra-renal tension was rapidly increased, reaching its maximum in about one hour and a half from the beginning of the experiment, when the mercury would show an elevation of from 65 to 72 mm.; the pressure would then gradually diminish, showing in four hours only about 46 mm. In several instances the experiments were continued over a long period. In one of these the mercury showed an elevation of 11 mm. after twenty-six days; 3 mm. after sixty-two days and 3 mm. also after four months. In the experiments regarding the effect upon the secretion of urine, it was found that a kidney, the ureter of which was ligated, secreted during four hours but 2.5 cm. of urine, whereas the opposite, unobstructed organ produced 40.11 cm. of fluid. When the ligature was removed it was found that the secretion was at once re-established and a temporary polyuria occurred.

Regarding the excretion of urea, it was found that intra-renal pressure exerted a marked influence in diminishing the amount excreted, and that this diminution was more marked the longer the pressure was maintained. After a long-continued tension was relieved the amount of excreted urea would again increase, but never quite reached the normal proportion.

The effect of total obstruction of the ureter was to cause a rapid destruction and atrophy of the renal parenchyma.

The points of clinical interest brought out by these experiments were, that, whereas slowly-developing, incomplete obstruction of the ureter, tends to develop extensive hydronephroses with but moderate destruction of the tissue of the kidney, sudden and complete obstruction results in rapid renal degeneration with but a small collection of fluid.

G. E. BREWER.

A New Method of Securing Pure Cultures of the Gonococcus. C. GEBHARD.
(*Berliner Klin. Wochens.*, No. 11. 1892.)

The author first calls attention to the great difficulty which has always attended the isolation and pure culture of the gonococcus. The desirability of an accurate and comparatively easy method has long been felt by those interested in studying the relation between this organism and the various forms of pelvic inflammation in the female.

In the *Deutsch. Med. Wochens.* (No. 50, 1891), Wertheim published a report of a method by which he was able by plate cultures to separate and easily distinguish the colonies of gonococci. He employed a mixture of human blood serum and nutrient agar, the preparation of which he described in detail.

The colonies of gonococci can be distinguished by their color, shape and the relative rapidity of their development.

The author has investigated seven cases of gonorrhœal disease in the

female, and demonstrated by microscopic examination, staining reaction and inoculation experiments, the accuracy of his observations.

G. E. BREWER.

Improvements in the Electro-Endoscope. DR. OBERLÄNDER. (*Archiv für Derm. und Syph.*, 1892, III. Heft.)

In this paper the author gives an account of some improvements which have been devised as a result of suggestions furnished by a more or less constant use of the endoscopes of Nitze and Leiter.

The most important improvement seems to be a substantial enlargement in the caliber of the tubes used. Formerly only instruments with a caliber of 22 or 24 F. was employed. It was found, however, that in a large proportion of the cases examined tubes of 28 to 30, and even 32 F., could be introduced. As these yielded a much larger field of vision and better illumination, their use was found to be of great clinical value.

The advantages to be derived from practicing internal urethrotomy, under guidance of the eye, by means of improved endoscopic instruments, are spoken of and the apparatus described and illustrated. (This procedure was, however, first described and practiced by Dr. F. Tilden Brown, of this city, who demonstrated its practicability and exhibited his instruments before the Genito-Urinary Section of the N. Y. Academy of Medicine, some six months before the publication of this paper.)

The writer is of the opinion much may be expected from the employment of electrolysis and the direct application of the galvano-cautery, in stricture and hypertrophic disease of the urethra: and his appliances for carrying out these suggestions are also described among the more recent improvements. Considerable advantage has been gained in deep urethral endoscopy by the employment of the hinged-obturator which enables the observer to introduce the straight tube to the membranous urethra without pain or difficulty.

G. E. BREWER.

Syphilis of the Pharyngeal and Pre-epiglottic Tonsils. DRS. MOURE and RAULIN. (*Rev. de Larynx, Ot. et Rhin.*, No. 6-7, 1891.)

The writers make a contribution to the study of the manifestations of syphilis upon what have been described as the third and fourth tonsils, or in other words in the adenoid tissue in the vault of the naso-pharynx and in the follicles of the buccal pharynx at the base of the tongue.

The lesions, it would appear, are identical with those which occur upon tonsils proper, but their study has been neglected. When present they may cause modifications in deglutition, phonation and respiration, and may point to the seat of trouble in ear complications where nothing is taught by a superficial examination of the back of the mouth and throat. Dr. Labit thinks the abuse of alcohol and of tobacco influences not only the development of these lesions but their duration.

Syphilitic Choroiditis. DR. GALEZOWSKI. (*Recueil d' Ophthal.*, No. 1, 1892.)

The writer says complications of all sorts can be produced in eyes affected with syphilitic choroiditis. Glaucoma sometimes comes on with such rapidity that unless surgical measures are instituted at once the vision will

be compromised. Fortunately this condition is rare, and in the three cases seen by the author iridectomy has at once arrested the glaucomatous accidents. A case is cited in which the cornea, the iris and the choroid were successively implicated, and during a period of four years the patient had a keratitis, an iritis and a choroiditis one after the other, and a cure was finally effected by eighteen months of mercurial frictions. The author insists on the continuation of inunctions till the end of two years, and a six months' additional course was given in this case. Otherwise a complete cure of a syphilitic choroiditis is not to be expected. Internal treatment remains without effect on the choroiditis, as the author has convinced himself in hundreds of cases treated during the past fifteen years. Neither protoiodide or sublimate pills, the syrup of Gibert or iodide of potassium cure a syphilitic choroiditis even if given for two or three years, while mercurial frictions of two grains of the double ointment daily cure without the occurrence of relapse.

CHARLES W. ALLEN.

Syphilitic Gummata of the Conjunctiva, GALEZOWSKI. (*Recueil d' Ophthalm.* No. 1, 1892).

Secondary or tertiary syphilis, according to the writer, can invade the bulbar conjunctiva and produce these circumscribed tumors, which may simulate phlyctenule, especially if the surface becomes ulcerated. The diagnosis in this case would present great difficulties and especially as cases of this nature are excessively rare. The following case of multiple syphilitic gummata situated around the margin of the cornea which had begun to appear as little nodules about the cornea twenty days before, some were as large as the head of a pin, others of an ovoid form with irregular outline. Their surface is convex or bulging, smooth, and not sensitive to the touch. The conjunctiva is not to be displaced over these tumors, some of which are ulcerated with the borders clean cut. The rest of the conjunctiva appears normal. Treatment by means of daily frictions with mercurial ointment; instillations of atropine and vapor douches to the eye brought about prompt improvement and at the end of five months complete cure, but with some traces of iritis and posterior synechia. Two years later some conjunctival cicatrices were found adherent here and there to the sclera at the site of the previous gummata.

CHARLES W. ALLEN.

Hystero-Syphilis.—DR FOURNIER (*Annales de psych. et d'hypnologie*, January, 1892).

The author relates the case of a young man, who three months after infection began to show nervous and hysterical symptoms and finally fell and lost the power of speech for five days. Motor and sensory hemiplegia was present on the left side. Anti-syphilitic treatment was followed by marked amelioration, but the patient left the hospital and the hysteria soon showed itself again, with a laugh coming on whenever a bright object was seen and attended with a most disagreeable feeling of constriction in the chest and throat. Almost every day at a fixed hour the patient would become intellectually unaccountable for his acts and would not know what he did for a period. Before contracting syphilis no tendency to hysteria could be discovered but as we know that women often show nervous symptoms and become neurasthenic after becoming syphilitic there is no valid reason why a man may not do the same.

C. W. ALLEN.

How to raise Syphilitic Infants.—DR. NICOLLE. (*L'Union Médicale*, February 2, 1892).

The writer in his work on the nursery of the hospital of the *Infants Assistés* recommends that an infant with hereditary syphilis should

1. Be nursed by its mother, or if this is not possible by a nurse who is syphilitic.

2. If neither mother nor nurse can be secured that it is well to let the infant take the milk direct from the teat of an ass, but only for the first few months.

3. This must be replaced later on by cow's milk. The arrest of development in the infant indicates the time when this change should be made.

4. In the impossibility of securing ass's milk we must resort to diluted cow's milk, sweetened and boiled. It is always a defective alimentation.

5. Whatever food is adopted it must be continued much longer than in the case of a healthy child. It seems to the author there would be an advantage in giving goat's milk taken from the udder of the animal from the age of six or eight months up to sixteen months or longer.

6. Treatment by Van Swieten's fluid from fifteen to fifty drops per day according to the age, strength intensity of the manifestations, etc., is advised. Occasionally the dose may be increased but should never exceed five grains.

7. Most minute attention should be paid to hygienic measures, baths, change of air, etc.

C. W. ALLEN.

Book Reviews.

Syphilis du Système Nerveux. By DR. W. GAJKIEWICZ. Paris, 1892 : Baillière et fils.

The literature of the last few years on the manifestations of syphilis in the nervous system is large and widely scattered. The volume under consideration brings the discussion of the subject up to the present day, and is largely a compilation of the views and statistics furnished by other authorities which are sifted and commented on very judiciously. Although the author does not inform us it was probably with a view of collecting the scattered literature and putting it in useful shape that the conception of this volume had its origin. Its greatest use will be for the general practitioner and others who have not paid special attention to the subject treated of although the latter may find much to interest him in the way of review. The author considers nothing too elementary to be passed unnoticed and his statistics, cited in various parts of the volume, are useful and some will have a permanent value, such, for instance, as those concerning the arteries first involved. He classifies syphilitic manifestations in the nervous system under, 1st, Changes in the vessels; 2d, Gummata; 3d, Diffuse infiltration, and insists that the syphilitic manifestations show themselves first in the tissues developed from the blastoderm, the meninges and neuroglia. He is of the opinion also that inherited syphilis has the same influence as acquired syphilis. After thus making a study of the lesions in general which permit us to judge of the pathology, the author gives a detailed account of the

resulting state of affairs when the syphilitic manifestations show themselves in the cortex, the peduncles, the pons, the medulla, cord and peripheral nerves, and it is in the latter that one will find the best reward for the reading of this volume. Fortunately the tone of the volume is not too dogmatic and neither in the discussion of general paralysis or tabes does the author do more than to cite the opinions and objections of others, without committing himself or taking part in the arguments. This permits one to draw his own conclusions, without being at all influenced by the writer.

The volume ends with a general consideration of the diagnosis of syphilis of the nervous system, its prognosis and treatment, and these, particularly the latter, could be considerably extended with material addition to the usefulness of the volume. As they are they scarcely do the remainder of the book credit. Taken as a whole, however, it is safe to say that this brochure can be taken as an excellent explication of our general knowledge of this subject at the present time. One point we are constrained to mention, and that is the lack of breadth in the author's reading shared by many other European writers, by which almost the entire American literature on this subject is overlooked; scarcely two writers receiving casual mention although we must say with pardonable pride that some of the best work on this subject has been done on this side of the water. J. C.

Diseases of the Urinary Apparatus. Phlegmasic Affections. By JOHN A. S. GOULEY, M.D. New York: D. Appleton & Co., 1892.

The twelve lectures, principally upon the inflammations of the urinary tract, or as the author says in his preface, upon the phlegmasic affections, were delivered during the Fall of 1891, at the Mott Memorial Library. They are written in the well-known style of the author, and the peculiar nomenclature, while it is etymologically correct, rather detracts from the practical value of the book, as the majority of readers must pause frequently to understand what the author means to convey by certain terms. When the profession universally adopt Prof. Gouley's nomenclature this drawback will no longer exist. Dr. Gouley ignores the work of Guyon and the Necker school in his views upon the physiology of the bladder. He likewise puts no faith in modern pathology. The entire subject of urinary infection and the work of Clado, Albarran, Hallé, Røvsing, Achard and Reblaud is passed over in silence, and the names of these investigators do not occur in the lectures.

The practical and clinical part of these lectures is written in a popular style, and is therefore likely to appeal to a large class of readers. Dr. Gouley believes that gonorrhœa is a non-specific disease. In treatment, a number of useful hints as to the management of patients is given, and if one can learn tact from reading, this will be a valuable book for those who lack it. The modern methods based upon the germ theory are ignored.

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Original Communications.

THE TREATMENT OF TUBERCULOSIS OF THE BLADDER THROUGH A SUPRA-PUBIC SECTION.

BY

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McGill University.

THAT the bladder is frequently the seat of tuberculosis, either primary or secondary, is a well established fact, and observation shows that generally speaking the progress of the disease in this situation does not materially differ from its progress in other localities. Its favorite site is in the trigone and around the neck of the bladder, while the disease remains for a long time confined to the mucous membrane, and only in advanced cases are the deeper tissues invaded. The diagnosis is difficult, and often a positive diagnosis is impossible, for the bacillus is frequently to be found only after repeated examination, or not at all. The disease may be primary and confined to the bladder, but is usually associated with, and probably most frequently, secondary to tubercular lesions elsewhere, especially in other parts of the genito-urinary system—notably in the kidneys or testicles. I do not propose to discuss the many interesting problems in connection with the etiology and mode or modes of transmission and extension of the disease, nor to deal with other methods of treatment than that designated in the title of this paper; but to limit the discussion to those severe and advanced cases in which general medical and local treatment have failed to give relief, and in which

the pain and frequent or constant desire to micturate have rendered the patient's life useless, if not burdensome. Such are the following cases:

Case I. W. K., æt. 26, laborer, was admitted to the Montreal General Hospital on December 26, 1889, suffering from frequent and painful micturition—the urine containing blood and pus. The patient, who had been absolutely deaf from the age of six years, was much emaciated and wore an expression of great suffering. He attributed his deafness to a severe illness which followed a kick from a horse on the tibia when he was six years old (pyæmia?). Patient had always lived a regular life, and had never had venereal disease in any form. There was no family history of tubercle. Present illness began twelve months prior to admission to hospital with frequent micturition, straining, pain at the point of the penis, and the expulsion of a few drops of blood at the end of the act of micturition. About two months after the onset of his illness he first noticed cloudiness of the urine, which had continued up to the time of admission. All these symptoms increased in severity, and at times, especially after exertion, the flow of blood was considerably increased, although it had never been great. The symptoms were also more severe in day time, and when the patient was actively employed. Patient also stated that at about the same time as the beginning of the urinary symptoms he had suffered from cough and some night-sweating. His condition when admitted is described as follows in the case book: "Patient is greatly emaciated; is in constant pain; micturates about every half hour—at times as often as every ten minutes. Micturition is followed by tenesmus, and the evacuation of a few drops of blood. Deep pressure above the pubes causes pain. The urine deposits a considerable quantity of mucus, is neutral in reaction and yields to boiling and nitric acid a deposit of albumen,—about 6 per cent. by volume in the test tube. The quantity of urine is difficult to estimate, but is probably about forty ounces daily. Patient is so disturbed at night that he gets hardly any sleep. The heart and lungs are normal, the pulse rapid, temperature generally normal, but with slight occasional rises of a degree or two. Constipation and diarrhoea alternating." Patient was etherized and the bladder explored. It was found to be small with rigid walls, and bled freely on the introduction of a sound. Bleeding was so easily excited that the cystoscope could not be used. Patient was kept in bed on bland liquid diet, soothing anodyne

local applications and morphia in the form of rectal suppository and hypodermically for five weeks without improvement when I decided to operate. His condition at this time was thoroughly miserable. He could get no sleep even with large doses of morphia and equally welcomed the proposal to operate as a chance of giving him relief. On February 4, 1890, the bladder was opened above the pubes in the ordinary way with the patient in the Trendelenburg position, and a Petersen's bag in the rectum. On opening the bladder the mucous membrane throughout was found to be of a deep livid red color, but free from ulceration except in the neighborhood of the urethral outlet. By means of a bivalve speculum and a small electric lamp the whole interior of the bladder was carefully inspected. A fringe of irregular superficial ulceration encircled the urethral orifice and oozed blood with considerable freedom. There was no induration surrounding these ulcers which were limited to the mucous coat and did not extend to the walls of the viscus. They were each carefully cauterized with the Paquelin Thermo-Cautery; the bladder flushed with a solution of salicylic acid and borax (1-1000), and a large drainage tube placed in the wound. There was a good deal of abdominal tenderness for three or four days after the operation which I attributed to the fact that the pre-vesical peritoneal fold had been stripped back for nearly an inch to allow sufficient space for opening the bladder. The urine now flowed away through the drainage tube quite clear and free from blood, and in a couple of days the old pain about the neck of the bladder and the point of the penis had entirely disappeared. In ten days the temperature, which had risen after operation to 102° F. had settled down to the normal, and the patient began to improve in every way. He could now sleep without opiates; his appetite improved and he declared himself freer from pain and discomfort than he had been for more than a year. The drainage tube was removed thirty-six days after operation, and the wound had closed completely three weeks later. Patient was then allowed up. He could hold his water for an hour, and when passed it was acid, transparent and free from pus and albumen. He was discharged three months after operation in good general health; free from pain and irritation about the bladder; greatly increased in weight and able to retain his urine for nearly two hours in day time and somewhat longer at night. Unfortunately the record of this case ends here, as I have been unable to find any trace of the patient since he left

the hospital. I have gone very fully into details in reporting this case, as I think it may be considered fairly typical, although tubercle bacilli were not found in the urine. In fact the urine was not as carefully and systematically examined in this respect as it should have been.

Case II. H. P. age 33, farmer. Had suffered for three years with frequency of micturition and muco-pus in the urine. The symptoms had gradually increased in severity, and for a year before operation patient had occasionally found some blood at the end of the stream. For about six months the symptoms had been very urgent. He was obliged to pass water about every half hour, and suffered from incontinence at night. There was constant pain about the neck of the bladder. The urine was acid, containing a varying quantity of muco-pus, in which a moderate number of tubercle bacilli were discovered. Patient had never had any venereal disease, and there was no family history of tuberculosis. The lower half of the left testicle and epididymis was occupied by a hard smooth mass (tubercular disease of the testicle). The other organs were healthy. On the 9th of October the bladder was opened above the pubes, as in the preceding case. The appearances were also very similar to those already described,—a contracted bladder with thick walls, deeply congested mucous lining, and superficial ulceration in the trigone and around the urethral orifice. These were scraped with a Volkmann's spoon and cauterized with the thermo-cautery. The immediate result exceeded my expectations. The patient recovered from the anæsthetic with the bladder pain completely relieved. Not a bad symptom followed; clear acid urine flowed through the drainage tube, which was removed three weeks after operation. Patient returned to his home in the country five weeks after operation in good health and free from bladder irritation, but with a small fistulous opening remaining where the drainage tube had been. On February 9, 1891, patient returned to have the testicle removed, as I had advised. In the meantime he had not suffered from bladder symptoms, beyond the discomfort of the urinary fistula which had increased in size. On the 19th of February the testicle was removed and the bladder sinus scraped and packed with iodoform gauze. He remained seven weeks in hospital, during which time he was quite free from bladder irritation. The urine was clear, acid and normal in every respect with the exception of a little excess of mucus. The sinus had nearly closed—only a few drops of urine oozing out at times. For my latest report of the patient

I am indebted to Dr. T. L. Brown, of Melbourne, who visited him at my request and wrote me as follows on the 9th of August last (1891): "The supra-pubic wound is not yet entirely healed, but the opening is very minute—about large enough to pass a fine straw through. He has very little difficulty with his urine. It never trickles out of the opening when walking, but does so slightly when he is either sitting or lying down. When tired it will pass involuntarily by the natural channel in small quantities, otherwise it does not bother him. He never suffers pain unless he retains the urine too long, and even then pain is slight. His general health is much improved, being stronger as well as better in appearance than before the operation. He rests well and has little or no trouble at night. He has a good appetite, and attends to his farm work, doing light work in the hayfield, etc. On the whole he is well satisfied with his condition, and thinks that if he could only have the small sinus closed permanently he would have little to wish for. The urine is clear and apparently normal." Since writing the above I have received the following report from Mr. Brown, who again visited him at my request. He says: "I saw P— yesterday (April 21, 1892). He is still gaining in strength; is able to do a good day's work, and feels that he has a good lease of life yet. The opening above the pubes has practically closed; only very occasionally it leaks a little. Ordinarily there is no sign of an opening, and for a long time he considered it completely closed. He is still troubled a little with incontinence, but reports a great improvement in that respect also. His virile powers are as good as ever they were."

Case III. A. M. *et.*, 25, carriage maker. Was admitted to the Montreal General Hospital on September 2, 1890. He was a man of regular habits; had never had venereal disease, and had no tubercular history. He had suffered for five years from frequent and painful micturition, with pus and occasionally small quantities of blood in the urine. Patient is described on admission as "pale and emaciated, but free from fever. Micturates every few minutes, and suffers from constant pain about the bladder, and at the point of the penis. Urine is acid and contains muco-pus and albumen. Left testicle is hard, swollen and adherent to the scrotum, through which a couple of sinuses discharge each a drop or two of sero-pus. The swelling of the testicle, which has been very gradual, began about three years ago. Heart and lungs normal." A perineal cystotomy was performed on the 9th September (1890) and a large soft rubber

catheter tied into the wound. This operation afforded little or no relief and on September 23d the catheter was removed. On the 1st of October the patient first came under my care. The perineal wound was then nearly closed, and the symptoms and general conditions were about as described in the above extract from the case book. The patient's sufferings were severe and continuous, so that he could not sleep. After a month of observation and local treatment I opened the bladder above the pubes (November 1, 1890) and explored it carefully by the aid of the electric lamp. The trigone and a band of about an inch in depth around the urethral orifice were the seat of many superficial ulcers, varying in size from that of a split pea to irregular patches as large as a five cent piece. The mucous membrane of the whole fundus of the bladder was also studded with small tubercles which had not advanced to the stage of ulceration, nor indeed even to the length of showing signs of caseation. The ulcerated patches were scraped and cauterized, but the little non-ulcerated tubercles were left untouched. They were so numerous that it would have been impossible to deal with each one singly. A large tube was left in the wound and the symptoms were for the time almost entirely relieved. The patient's general health improved as well as all the symptoms except that the urine still contained pus. On account of the extensive tubercular deposit in the mucous membrane of the bladder (which had not been treated at the operation) and the tubercular testicle, the patient was submitted to the tuberculin treatment from December 26, 1890 till about February 1, 1891. The fever "reaction" was very marked after each injection, but the local signs were less definite except that there was a steady and gradual increase in the amount of pus discharged with the urine, and the patient's general health deteriorated rapidly, although the bladder irritation (frequent and painful micturition) never returned. On February 19th, the testicle was removed and pronounced by the hospital pathologist to be typically tubercular. From this operation he recovered without a bad symptom, although the general health did not improve. The temperature remained high, and there was at times profuse sweating. There was great emaciation and the urine was loaded with pus. In this condition I left him on the 14th March, never expecting to see him again.

On my return from Europe in July I enquired about him, but could find no trace of him other than the following note in the case book dated March 25th: "Patient became discour-

aged and went home." In September he came to report himself as much improved and hopeful. He has continued to improve without any further treatment steadily ever since and to-day April 18, 1892, he reports himself in good health and spirits, and is working every day at carpenter work. He has no pain nor irritation about the bladder. He can retain his urine from one to two hours, but has little power to control the bladder function, and at times the urine escapes involuntarily. Patient suffered in this way before his admission to hospital to such an extent that he wore, then as now, a rubber urinal when moving about in day time, so that this condition is not dependent upon the operation. The stump of the vas deferens is thickened and as large as a large goose quill. Twice since he left the hospital a little abscess has formed and opened itself over the end of the stump, but it is now quite healed. The urine is slightly turbid from a light mucus cloud which settles on standing, but it is acid in reaction, free from pus and blood, and when tested with heat and nitric acid shows no evidence of albumen. The patient suffers from aching and lameness through the left side of the pelvis, the cause of which was not investigated. It is probably, however, associated with the tubercular vas deferens, or due to tubercular infiltration of intra-pelvic glands. Otherwise his health is good and his functions normal. The body weight of this patient before and during his illness is interesting. Prior to his illness his highest weight was 165 lbs.; when admitted to hospital he weighed 125 lbs., and when he left the hospital his weight was 105 lbs. It is now 145 lbs.—more than at any time since his illness began.

The only recorded cases of this operation with which I am familiar are those of Guyon, Reverdin and Battle. (The case reported by Mr. W. H. Battle was that of a female patient, in whom both the conditions and symptoms discovered, as well as the operation differed materially from those above described.)

At the French Surgical Congress held in Paris in October, 1889, Prof. Guyon reported the results in three cases on which he had operated. The following is a brief epitome of his report:

Case I, operated upon in July, 1885, recovered and remained well. He was able to continue his work, and at the time of the report his condition from a genito-urinary point of view was completely satisfactory.

Case II, died two years and two months after operation from double pyelo-nephritis, which existed at the time of opera-

tion, and which was demonstrated at the autopsy. A fistula remained after the operation, but at the autopsy the bladder was found to be perfectly free from tubercle. No bacilli were observed in the urine after operation, although they were abundant before.

Case III, operated upon in 1888, after having suffered from bladder symptoms for nine months. The right kidney was manifestly implicated in the disease, and operation was decided upon to give relief. The chief symptoms were frequency and pain in micturition, so severe as to render rest impossible, the patient having to urinate as often as a hundred times during the night. The operation relieved the symptoms without arresting the progress of the disease, and the patient died in about a year. At the autopsy the mucous membrane was found to be free from tubercular lesion.

The advantages of this operation are both immediate and remote. The immediate results in every case reported were the full relief of the painful and frequent attempts at micturition; the arrest of hemorrhage and in a short time the cessation of the pus discharge except in those cases where the pus came from sources other than the bladder ulceration. The remote effects have been far more satisfactory than one could have fairly expected. My three patients, as far as is known (two of them certainly), have recovered quite as completely as we ever expect tuberculous patients to recover, especially where it is impossible to extirpate the diseased organ. Of course when tuberculosis of the kidney already exists relief of bladder symptoms is all that can be looked for. This operation, moreover, is sound in principle, and is carried out exactly on the same lines as the treatment adopted by surgeons for tubercular disease of other organs, and while it may not give as brilliant results as some joint operations, for example, it would seem by effecting the removal of the diseased tissues and giving temporary rest to the organ, to offer the best, if not the only hope to many patients who are the subjects of tuberculosis of the bladder. Compared with perineal cystotomy it gives far more satisfactory rest to the bladder, inasmuch as the urine escapes through a healthy portion of the bladder wall leaving the inflamed and ulcerated region just within the neck of the bladder free from the irritation of a catheter or drainage tube.

In conclusion, I believe that this operation, which is neither difficult nor dangerous, and which brings the diseased areas directly under the eye and hand, can be relied upon to give more

prompt, more complete and more lasting relief to those very distressing conditions produced by ulceration of the mucous membrane of the bladder in the immediate neighborhood of its outlet than any other method of treatment at present known to surgeons.

ON THE USE OF IODINE TRICHLORIDE IN GENITO-URINARY SURGERY. PRELIMINARY NOTE.¹

BY

WM. T. BELFIELD, M.D.

Chicago.

LAST Fall there appeared in reports from several European laboratories allusions to the trichloride of iodine, which induced me to investigate this agent clinically. The results are such as to lead me to direct the attention of this Association to the apparent value of the agent in certain common disorders of the genito-urinary tract.

First, a word as to the substance itself: It is, as the name indicates, a simple compound of iodine and chlorine—formula Icl_3 —made by passing chlorine gas over iodine. The result is a reddish yellow powder, emitting an odor of chlorine and readily soluble in water. I keep it in stock as a 5 per cent. solution in distilled water.

When a few drops of this or a weaker solution fall into normal urine, instant decomposition ensues, both chlorine and iodine being liberated in the nascent state. To my colleague, Prof. Walter S. Haines, of Rush Medical College, I am indebted for the demonstration that this reaction is caused not by any of the urinary salts, but by an organic constituent of the urine, probably mucin. The same reaction occurs, though less rapidly, with blood, pus, saliva and an infusion of muscle or connective tissue.

A 1 per cent. solution rapidly sterilizes pure cultures of *staphylococcus pyogenes aureus*.

These facts suggest great usefulness in treating local morbid processes dependent upon bacterial invasion. Yet, we have learned by various experiences—particularly Geppert's work with bichloride—not to transfer deductions from the test-tube to the living body. I have used the agent somewhat extensively in the past six months; in this preliminary communication I shall mention only a few of the genito-urinary cases.

¹ Announced to be read before the Sixth Annual Meeting of the American Association of Genito-Urinary Surgeons.

I. Male, aged 39, tuberculosis of bladder: instillation with Icl_3 solution, beginning with one-fourth of 1 per cent., increasing in four injections to 1 per cent. In three weeks pus and pain were greatly diminished: intervals of urination lengthened from forty minutes to three hours. Here the treatment was interrupted by my own serious illness; the patient, seen once subsequently, stated that the improvement was still maintained.

II. Mrs. K., referred to by Dr. Fry, of Bracken, Ind., cystitis for seven years; urination every hour or less, urine containing much pus and some blood. Digital exploration revealed distinct tuberculous ulcer in upper segment of bladder, felt by several gentlemen present at the operation at the Polyclinic. In twelve days three injections of Icl_3 solution—from one-half to 1 per cent.—were made, after which patient returned home. Two months later Dr. Fry reported that the patient considered herself practically well, retaining the urine several hours and passing it without pain.

Treatment was discontinued in these cases, not because they were considered cured, but because both were unable to remain in the city longer.

III. and *IV.* Two cases of tuberculosis of epididymis with old fistulae. These were treated with hypodermic injections of Icl_3 , one-eighth to one-fourth per cent. In both the fistulae healed—for the first time in years—and the nodular masses were reduced in size over 50 per cent. in a few weeks.

It has also seemed a valuable agent in checking fermentation in the bladder in cases of residual urine from prostatic enlargement.

While the cases narrated are too few and too incomplete to prove anything, they suggest the desirability of further testing this agent in the treatment of that most frequent and refractory malady, genito-urinary tuberculosis. And it is merely in the hope that other members of the Association will follow this course that this communication is made.

THIRTEEN CASES OF TUBERCULOSIS OF THE SKIN WITH THEIR
TREATMENT.¹

BY

J. S. HOWE, M. D.

Boston.

I PRESENT these cases of tuberculosis of the skin before this Society, not so much because I have anything new or original to offer, but because I hope to add something to the evidence already collected on this subject, which may help us in the important discussion of this disease which is to take place among the members of this Society. These cases have been seen by me during the past five years and include both private and charity patients. I will add, however, that with two exceptions they have occurred among the lower classes of people, and mostly among the very poor, just as phthisis is more common among people of the same conditions and surroundings. Some of the cases cannot, I admit, be classed without perhaps some question under the head of tuberculosis of the skin, simply from want of proper pathological confirmation of the diagnosis. In spite of this however, I believe them to be such, and I consider that we are warranted in making such a diagnosis in some cases from the history and clinical aspect of the disease when the microscope fails to reveal the typical bacillus of tuberculosis. It is generally admitted that in some cases large numbers of sections must be examined before the bacillus can be found and I believe that failure after such examination to find the bacillus will not in all cases invalidate our diagnosis. In some of these cases it has been impossible to obtain material for microscopical study, but wherever I could do so, I have secured bits of the diseased tissue and had it carefully examined, and I shall give in brief form the results obtained in each case when such examination has taken place. I find among my records the notes of thirteen cases which I will now present to you for your consideration.

Case I. M. B. aged 27. This was a young woman belonging to a family in moderate circumstances. The father died five years ago of phthisis. The three children of this family had always been fairly well and strong until two years ago, when the sister of my patient became ill, and their physician told the family that she had incipient phthisis. The disease progressed quite rapidly and during the last three months of

¹ Announced to be read before the Fifteenth Annual Meeting of the American Dermatological Association.

her illness my patient took entire charge of the case and washed all her sister's linen and bed clothing. A few weeks before the death of her sister she scratched her fore-finger with a pin and according to her story this wound never completely healed. Physical examination of this patient showed her to be strong and healthy in every way. When she presented herself to me there were two lesions upon the skin of the left hand. One occupied the skin over the first phalanx of the index finger upon the place which had been scratched by the pin. It was of irregular outline, nearly an inch in length, and from a quarter to half an inch in width, and raised somewhat above the surrounding surface. It was freely movable but extended, judging by the feeling, deep into the layers of the skin. Around the borders extended a narrow zone of redness shading rapidly into the color of the adjacent skin. The surface of the lesion was dry and hard presenting a rough warty appearance and of a bluish red color. The second lesion was of a similar appearance and situated in the space between the metacarpal bones of the thumb and fore-finger. Its shape, however, was rather oval than elongated and it was about the size of a large bean. It appeared about five weeks after the first lesion and had been steadily but slowly increasing in size. My diagnosis was tuberculosis of the skin and the removal of the growths by operation was strongly advised. To this the patient consented. With a rubber bandage a bloodless operation was possible. After the blood had been removed from the hand and the bandage securely fastened at the wrist, cocaine was used to render the operation painless. Both growths were then removed by a clean incision extending a short distance outside the border line of redness and down through the thickness of the skin. The edges of the wound were then brought together with fine stitches and as the operation was done antiseptically healing took place by first intention. This patient was seen two years after the operation and only slight scars were present at the seats of the old lesions, and there had been no return of the disease. A microscopical examination of the tissue removed showed it to be purely tubercular in nature and in some of the sections stained, and examined by Ehrlich's method a few typical bacilli were found.

Case II. J. A. F., 21 years of age, with a good family history, and in the best of health, being particularly strong and robust, presented himself to me for examination with a lesion on the back of the hand over the metacarpal bones of the little finger. This man had been for two years employed in and about the cattle yards of Brighton and had seen and cared for several animals suffering from tuberculosis and condemned to death by the cattle commissioners of Massachusetts. About six months before I saw him he noticed a small pimple as he called

it upon the back of the hand. It was painless and gave him no trouble in any way until about three weeks after its first appearance, when it seemed to contain a little pus. He at this time opened it with his knife, when he was able on pressure to squeeze out a minute drop of purulent matter. From this time the lesion increased very slowly in size and presented on inspection the following appearance. It was about the size of a ten cent piece, irregularly round and raised considerably above the surface of the surrounding skin. To the touch it was rather hard, firm and rough. On one side were a few small superficial pustules. The centre of the patch was considerably higher than the edges and was made up of a warty growth covered with crusts. The area of redness, so noticeable in some of these cases at the borders of the lesions, was here entirely absent. A small piece of the skin cut from the edge of the growth was examined microscopically. It presented all the elements of giant cell tubercular infiltration and a few tubercle bacilli were found in some of the giant cells. For several weeks the patient objected to operative interference and during that time various remedies were tried externally. At first mercurial plaster was applied but as no progress was apparent after two weeks' time this was given up, and an ointment of aristol and lanolin was used. In ten days this was changed for diachylon ointment containing one drachm of salicylic acid to an ounce of the ointment. Finally becoming dissatisfied with the treatment the patient consented to an operation, and after thoroughly curetting the growth and cauterizing the surface with nitrate of silver the wound was dressed antiseptically. In two weeks time it had entirely healed leaving a slight scar and the last time I saw the patient, some six months later he reported himself as well in every way.

Case III. This patient was a young girl aged 17. In appearance she was small for her age, of slight stature and very anæmic. The family history was poor, the mother having died of phthisis, and the father being often sick and ailing and never at any time in robust health. Two months before coming to me the girl had her ears bored for ear rings. The left ear had healed completely, while the lobe of the right ear was the seat of a very curious lesion. The whole lobe was much swollen, intensely reddened and soft and yielding to the touch. Around the sight of the puncture was a nearly circular ulcer about the size of a split pea with ragged edges. On the surface of the ulcer was a thin coating of pus and serum and at times a scab would form which was very easily detached. I considered this a severe local dermatitis and treated it as such, but as there was no improvement in the appearance of the ulcer after three weeks' time and as, on the contrary, it was slowly increasing in size, I began to suspect tuberculosis. I suggested cutting and cauter-

izing the lesion. To this the patient consented and prompt recovery took place. The small amount of tissue scraped away was carefully examined and proved to be tubercular and numerous tubercle bacilli were present. This patient died two years afterward of phthisis.

Case IV was a woman 32 years of age. Had always enjoyed the best of health. Two sisters and a brother had died of phthisis. One year previous to seeing me she had noticed a small papule over the first phalanx of the middle finger of the right hand. It was slightly reddened and soon after appearing discharged a small amount of pus. It slowly increased in size and when I first saw her it was about half an inch in length, and from an eighth to a quarter of an inch in width, with irregular borders. There was a narrow line of redness extending around the edges of the lesion which disappeared on slight pressure. The growth was rough and warty in appearance, slightly crusted and fissured and a very slight amount of pus exuded from the cracks on pressure. I considered this a typical case of *tuberculosis verrucosa cutis* and advised a prompt removal of the growth. To this the patient would not acquiesce, so external applications were used. At first I tried iodoform in castor oil but the patient objected so much to the odor that after a week's use of this I changed it to aristol and castor oil. Later I used simple mercurial ointment and after trying this for two weeks I used salicylic acid in diachylon ointment. Finding that there was no practical result from this treatment the woman at last consented to operative interference. I decided to try electrolysis, using a flattened needle and passing it beneath the lesion from side to side and in several different places. The result was highly satisfactory, as the growth fell off in a few days and healing followed rapidly, the scar which now remains being slight. The piece removed was examined and was histologically tubercular; but although several sections were carefully examined, no tubercle bacilli were found. The sections examined showed a thickening of the horny layer of the epidermis, an elongation of the papillae which contained dilated blood vessels and a decided infiltration of round cells; while in the upper part of the corium were clusters of giant, lymphoid and epithelioid cells, some of the giant cells showing signs of cheesy degeneration.

Case V. This case occurred in a young woman 26 years of age. When I was called to see the case the patient was confined to her bed and in the last stages of phthisis. I was asked to see her on account of a lesion which had appeared some six weeks before on the lower lip adjacent to the angle of the mouth. According to the patient's story a small pustule had appeared on the lip a few weeks prior to my visit. This pustule had broken down and around the edges were noticed a few days

later groups of very small discrete pustules pin head in size and nearly flat. These in turn ruptured and the sore increased gradually in size. This process continued slowly and the lesion when I saw it was irregularly oval in shape and had extended a short distance upon the mucous membrane of the lip. It presented the appearance of an ulcer with ragged edges, and to the touch was soft and very painful. I considered it an ulcerative tuberculous process and directed that it be dressed with powdered aristol. Although operative interference would not be tolerated by the patient or her friends I was allowed to lightly curette the lesion in order to get material for microscopical examination. The secretions thus obtained contained tubercle bacilli in large numbers. This patient died of phthisis ten days later, due to a sudden and profuse hemorrhage, from the effects of which she was unable to rally.

Case VI. was a young child five years of age. The mother had died of phthisis two years previously and a brother seventeen years of age had also died of phthisis about four months before I saw this child. Six months ago this boy was vaccinated and the family report that the operation was not a success. In a few days the place where the virus was introduced into the arm had entirely healed and remained in that condition for several weeks, when one day the father noticed on the arm at the place of vaccination a small pimple. This broke down and formed a small sore which had increased slowly in size, and was covered with a crusted papilomatous growth. At the time I saw it first it was nearly round and about the size of a cent. It was a typical case of tuberculosis verrucosa cutis in appearance and after removal by incision the growth was subjected to microscopical examination. It proved to be tubercular and contained tubercle bacilli.

The remaining seven cases which I shall report collectively contain no particularly interesting points. They all occurred in adults, four in males and three in females. All occurred in strong healthy persons although each case had been in contact with phthisical friends or relatives. All the lesions in these seven cases were on the backs of the hands or fingers and were clinically cases of undoubted tuberculosis verrucosa cutis. Two of them, however, refused operation and would not permit the removal of any tissue for examination and did not improve with several months of varied external treatment. One of these cases I lately saw nearly two years after external treatment had stopped. At the sight of the former lesion remained simply a grayish white soft scar, and the patient in his own words said "the sore gradually got well of itself in about a year and a half after he last saw me."

In the five other cases of my last seven the lesions were all

removed by incision, and antiseptically; all were examined microscopically, and all were undoubtedly tubercular in character, although in two of them no tubercle bacilli could be found, although several sections in each case were carefully examined for them. All these cases with the exception of numbers three and five come under the head of tuberculosis verrucosa cutis. Case number three, when the lesion appeared on the lip, seems to me to belong to the sub-acute military form of tuberculosis described by Kaposi, although there was no formation of scar tissue which was noticed in nearly all of his cases. Perhaps this may be accounted for by the short duration of the disease in my patient. This writer, however, had seen some twenty cases all but one occurring in males, so that according to those figures we may consider this case as unusual, having occurred in a female. Case number five also seems to be nearly of the same nature, although perhaps it would have in time assumed the appearance of a simple tuberculosis verrucosa cutis. Cases one, five and six also present evidences of a local inoculation at the seat of a previous injury. Case six shows the possibility of inoculation by vaccine virus which may have been produced from a tuberculous animal. While I do not claim that such was the case, in these days when so many rival firms produce and sell the virus it seems quite possible that such an occurrence might take place. Case number two presents an interesting and likely source of inoculation from tuberculous cattle. Dr. Bowen presented two cases of this disease before this Society last year among men employed on cattle-ships, and it seems highly probable that in these three cases the cattle may have supplied the source of inoculation. In my own case the care of tuberculous animals is, I think, very strong evidence in support of such a theory. Although some writers believe that the local inoculation of tuberculosis in the skin is exceedingly rare I believe we shall find in the future that such is not the case, and it seems to me improbable that in strong healthy people the bacilli should select the skin as a place for deposit and growth unless inoculated locally, when so many other tissues of the body are so much more favorable for their growth and increase. The question of the danger of the local inoculation of tuberculosis of the skin, I think, will receive more and more attention in the future as our knowledge of the multiform lesions and the frequent occurrence of the disease increase. At the same time we must not be too ready to class unusual cases of skin lesions under the head of tuberculosis, nor on the other hand must we overlook

any of these cases which may come before us. As to the treatment of this disease, I believe the thorough removal of the diseased tissue by any operative measure we may select is the only radical treatment of tuberculosis of the skin. In my own experience external applications have seemed to be of little value, although I may add that strong preparation of salicylic acid in diachylon ointment has, so far, seemed to me better than anything else. This preparation has not, so far as my observation goes, exerted any curative influence on the disease but it had removed to a certain extent the crusted and warty condition and also checked the slight secretion of pus better than anything else I have used.

In conclusion I would apologize for the hasty manner in which these cases have been reviewed; but as I said in the beginning of my paper I have simply reported them in the hope of adding a little to our knowledge of the disease and the frequency of its occurrence.

Society Transactions.

AMERICAN ASSOCIATION OF ANDROLOGY AND SYPHILOLOGY.

SIXTH ANNUAL MEETING, HELD AT RICHFIELD SPRINGS, N. Y.,
JUNE 21 AND 22, 1892.

DR. ARTHUR T. CABOT, OF BOSTON, *President, in the Chair.*

The President, after calling the Association to order, made a brief address of welcome. He congratulated the members upon the prosperous condition of the Association and its brilliant future. The programme of the meeting, he said, looked like a pleasant menu, containing the titles of many interesting papers, out of which he hoped the members would digest everything that was good and new.

Improved Instruments for Crushing and Removing Urinary Calculi, with Ten Cases Illustrating Their Use.—By DR. GEORGE CHISMORE, of San Francisco.

DR. L. BOLTON BANGS, of New York, said he was very much interested in the form of lithotrite exhibited by Dr. Chismore. He referred to the fact that the blades of the instrument were non-fenestrated, and thought there might be more danger on this account of catching the bladder walls between them, although this might not occur in the hands of a dexterous man like Dr. Chismore and with his own instrument. The washing-bottle shown he considered extremely simple.

DR. JOHN P. BRYSON, of St. Louis, said that in case the bladder walls were caught between the blades of the instrument, that fact could be very

¹ Will be published.

quickly recognized. He noticed that in Dr. Chismore's instrument the female blade projects for a considerable distance beyond the male blade, and thus acts as a protection. As far as catching the stone is concerned, the instrument seems to be admirable, especially in those cases that are complicated by enlarged prostate, where it is difficult to reach the stone. It is also very valuable in removing the last fragment, and one of its chief advantages is the arrangement of the instrument together with the simplicity of the washing-bottle, which obviates the constant removal and re-introduction of it. The constant re-introduction of the instrument results in a bruising of the prostatic sinns of the urethra, and this most complicates the operation of litholapaxy. Finally, it renders the operation easier, and puts it into the hands of the general surgeon. A number of cases have come under his observation where stones were removed from the bladder by supra-pubic cystotomy, which could have been taken out more easily by the lithotrite.

DR. CABOT said he seldom employs the instrument with a fenestrated blade. He habitually employs Bigelow's instrument, with the solid female blade. With a phosphatic stone, if the blade is fenestrated, you are likely to have a fragment of stone thrust through the opening. In order to prevent the sharp fragments of stone from injuring the bladder wall, you must raise the heel of the instrument from the bladder wall every time you screw down, thus constantly changing the position. It is always easy to tell when the bladder wall is caught, and Dr. Cabot said he thought the punch of a solid instrument would be less likely to do harm than the fenestrated blade. He thought Dr. Chismore's arrangement a very useful one in catching small fragments. He also referred to the simplicity of the washing apparatus.

DR. CHISMORE, in closing the discussion, said that the profession seemed to be divided on the question of the fenestrated instrument. Personally, he has never used it. He agreed with Dr. Bryson as to the harm likely to be done to the prostatic urethra by the constant removal and re-introduction of the lithotrite. He does not advocate the instrument to supersede all others, but claims that it is especially advantageous for removing the last fragment of stone.

DR. BRYSON inquired whether Dr. Chismore could give any explanation of the fact that so many of the stones taken from patients residing on the Pacific Coast are composed of oxalate of lime?

DR. CHISMORE replied that the only explanation he could suggest was the fact that the people there are great fruit-eaters. He does not think it is due to the water. The people eat fruit nearly all year round. This is merely a suggestion, however, as he has no positive knowledge on the subject.

The Perfected Electro-Urethroscope.—By DR. W. K. OTIS, of New York.

The perfected urethroscope consists of a small metal cylinder, one and one-half inches long by one inch in diameter, one end of which is open. Within this cylinder, one-quarter of an inch distant from the open end, is a plano-convex lens, immediately behind which is placed the source of illumination, a small incandescent electric lamp. The electric connections to the lamp are placed in a piece of hard rubber one inch long, which serves as a handle to the instrument, a cut-out being so arranged that the lamp is

under control and can be turned off or on, or renewed at pleasure. A stout wire, one and one-quarter inches in length, connects the instrument with the top of the plate of the Klotz urethroscopic tube by means of a small flat foot at its distal end, at the outer extremity of which is a smooth pin. This pin fits into a hole in the tube plate, and on revolving the instrument a quarter circle, the foot swings under a shoulder riveted to the plate and is securely fastened. This joint is firm and easy of manipulation, readily allowing the illuminator to be attached or removed at any time during the examination. Set hinged joints, swinging in opposite directions, at each end of the wire, allow the instrument to be turned in any direction. The rays of light passing through the lens are thrown down the tube, and the illuminated field is easily observed by an eye looking over the top of the cylinder.

The advantages of the instrument are the exclusion of all extraneous rays of light (a very annoying fault in reflecting urethroscopes), a much more ready access to the urethral field, both to the eye and for instrumental applications, and greatly increased illumination. The instrument is also very light and compact, being very much smaller and only one-seventh the weight of the Leiter instrument. The eye may be placed much nearer the mucous membrane to be examined. Its great simplicity of construction should insure a moderate cost.

DR. BANGS said that any one who is in the habit of using the urethroscope would consider the advantages mentioned by Dr. Otis as a great gain over the older instrument. By employing the lens instead of the mirror, the refracted rays of light are entirely shut out. As for a urethroscopic tube, after trying a good many, he has come to the conclusion that the Klotz tube is the most practical and useful.

DR. TAYLOR said that he also prefers the Klotz tubes. He has been employing the original urethroscope of Drs. Otis and Alexander, and was pleased to learn that Dr. Otis had still further improved it.

DR. BRYSON thought that the arrangement of the lens and the lamp was a very much better one than that in the old instrument, for the reason that it does not give such a mixture of the rays of light. He has employed the Oberlander instrument with good success.

DR. FORDYCE said he used the Oberlander instrument some years ago, and believed a better illumination could be obtained by it than by reflected light, but owing to its complications, he has adopted the simpler instrument of Dr. Otis. Oberlander has lately made a modification of his instrument by which a larger field can be obtained.

A Contribution to the Physiology of Sexual Impotence.—By DR. E. R. PALMER, of Louisville, Ky.

DR. PALMER said the subject can be divided into two sections: (1) Physiological impotence of the male, without any regard to sterility; (2) Physiological impotence of the female, with a like disregard to her procreative powers, avoiding, as far as possible, all of the many pathological influences and effects that are recognized by the profession as factors in this connection. In the impotence of youth, for which we are so often consulted, the fault rests largely in the common misconception with which the emission of semen is viewed by nearly everyone, the medical profession included. The youth is taught that semen is a marvelous product, a thou-

sand fold more precious than even blood itself. This, Dr. Palmer said, he considered an egregious error, and a blunder unwarranted either by analogy or by fact. We see its teachings evidenced not only in the melancholy youth, but in the adult of middle life, who not only exercises his will power to economize his stock, but bemoans the involuntary nocturnal pollution that results, as another precious charge futilely expended from his rapidly depleting magazine of pleasure. What evidence have we that in the regular use of the testicles, they, like glands and organs generally, are not developed and strengthened rather than weakened and exhausted? May we not say, rather, that within reasonable bounds, a natural, regular and frequent use of the sexual organs tends to an increase of their power, and, accepting the fact of occasional instances of over-tax, at the same time should we not equally recognize the hurtful influences of irregular use and continence in many cases of failure sexually, rather than to attribute all such failures to a worn out condition of the sexual apparatus? The impotence of youth is the impotence of inexperience, rather than incapacity: he tries and fails, not because of any previous exhaustion of his powers, but because of their imperfect development and training.

Turning from the physiological impotence of the male youth, we are confronted with the question of sexual failure in the otherwise healthy man in the prime of life: the man who, between 40 and 50, seeks our advice for the relief of failing or lost virility. Here again is to be met and combatted the common explanation, "You are reaping the fruits of self-abuse, or the excesses of your early life; you have, by one or both of these means worn out your precious powers, and there is no hope for you." In such cases, several causes other than exhaustion may be recognized. First, there is the not inconsiderable group represented by the man not passionate by nature, who has never exercised his sexual powers when he could help it, and then only in a perfunctory way. His feeble physical development sexually is father to his premature decay. Another class contains those who, recognizing the somewhat waning of their powers, begin assiduously to practice economy in that direction, hoping to conserve, where in reality they by continence destroy. Still another class of healthy middle aged impotents is represented by the man who is absorbed in business cares and worries. He feels that he is no longer a boy; life has become to him a solid reality, and so, whether weary from coupon cutting or worn out from futile efforts at kiting accommodation paper, he feels anything but kittenish when bedtime comes. Continence, Dr. Palmer said, means atrophy: disuse means decay, and the influence of persistent continence upon the individual, whether male or female, is to dwarf and in many respects destroy the breadth and fullness of physical and intellectual individuality.

The object of his paper, the writer said, is a plea for more healthy sexual living, and to make it plain, the study of the maid, wife and mother, from the standpoint of physiological impotence, is essential. The ideal young woman is almost necessarily impotent. From time immemorial the prerequisites in her moral and social qualifications have been modesty and chastity. That a universal law, acting through the ages, calling for unquestioned chastity in the maid and mother should have had its effect in a large proportion of the sex in modifying the sexual organs and desires, is not surprising: that it has not absolutely extirpated feminine sensuality, is perhaps more surprising. She is in absolute ignorance, personally, of that passion

that more than all other things combined, has fostered the finer arts, or pitted man against man in deadly strife. With a cool, contracted osseum vaginae, deep sunken beneath the symphysis, with pale, thin labiae and a clitoris scarcely discernable by the most crude touch, she represents the embodiment of the social ideal, whose happiness throughout life, at best of a negative type, is endangered only by finding out her physical shortcoming, and vainly striving toward its correction. This however, is but an extreme ideal type; the opposite extreme is also to be found, environed by danger that only too often bears bitter fruits. The sexual phase of sociology, in its evolution, has drifted the sexes widely apart. In a typical male, physical excitation is no longer an essentiality; a thought, a passing phantasy, suffices to give full play to his sexual powers, while with the average female not only is contact necessary, but a retardation of response and a limited area of receptive excitability is the rule.

In conclusion, DR. PALMER said that the primarily ruling causes in sexual impotency and incompatability to-day are evolutionary in their nature. That in the average being, the influence of heredity has made man abnormally and perversely sensual, and woman sluggish to a degree little short of absolute incapacity. That in this, as in the other physical errors of our inheritances, the skill of science should be invoked for the common good.

DR. BRYSON mentioned the fact that some of the lower animals have periods when they are really asexual; at such times the testicle of the male animal undergoes physiological atrophy and even recedes from the scrotal sac into the abdomen. Among these is the guinea-pig and certain other rodents. Dr. Bryson said that he did not believe any man ever lost any of his sexual power by abstinence. Some men lose their sexual virility because of constitutional weakness, and this perhaps may account in a large degree for their continence. The speaker also referred to the French classification of masturbation into the spinal and cerebral form, and said that in his opinion this subject would eventually be relegated to the field of the neurologist.

DR. CHISMORE referred to that hypochondriacal class of patients who have been mentally perverted by the quack, and who notice the most minute weakness of their functions. He agreed with Dr. Bryson that the subject of masturbation belonged to the domain of the neuropathist.

DR. CABOT said in regard to the second class of cases referred to in Dr. Palmer's paper—the man of middle age who is sexually impotent—that the loss of sexual energy is often associated with a general loss of nervous power, caused by overwork. He also referred to the fact that in many cases of impotence changes have taken place in and about the prostate. These patients must be distinguished from those in whom the loss of power is purely nervous. In the former class there is a chronic congestion of the prostate, with much irritability, and usually accompanied by a passive congestion of the tissues at the neck of the bladder, which can be relieved by local applications of silver nitrate.

DR. BRYSON also referred to the wonderful effect of applications of silver nitrate where the urethra is found sensitive and hyperemic. Where there is much irritability of the spinal centre he has had good results from the use of the hydrobromate of hyosine.

DR. FORDYCE mentioned having seen a patient in whom a general discoloration of the skin—argyria—has resulted from the prolonged local use of silver nitrate in the deep urethra.

DR. PALMER, in closing the discussion, said that the title of his paper had been overlooked by some of the gentlemen: his paper merely had to do with the physiology of sexual impotence, not its pathology.

Congenital Deformity of External Female Genitals. Entire Absence of Urethra. Spontaneous Dorsal Dislocation of the Hip as the Result of Effort to Retain Urine. Correction of Deformity and Restoration of Urethra by Plastic Operation. With some Observations upon the Technique of Ureteral Catheterism.¹—By DR. SAMUEL ALEXANDER, of New York.

DR. PALMER, in confirmation of one of the points mentioned by Dr. Alexander, said that he has noticed in vaginal examinations that gentle pressure with the finger just back of the symphysis pubis almost always creates a desire to urinate.

DR. W. K. OTIS said, in regard to catheterizing the ureters, that it is sometimes impossible to find the ureteral openings: even after the bladder has been opened they may be very difficult to locate, as they are often hidden in the folds of the mucous membrane.

DR. BANGS said he was exceedingly interested in Dr. Alexander's paper, particularly in that portion referring to the physiology of the bladder. It has always seemed to him that the desire to urinate comes directly from the bladder.

DR. BANGS confirmed the statement of Dr. Otis that there are cases in which it is very difficult to detect the ureteral openings, even after opening the bladder. In washing out the bladder, he has observed an interval in which there is apparently no urine in the bladder, and he has made use of this fact, with the aid of the cystoscope, in diagnosing cases of hæmaturia. He does not know how long this interval is; it varies in different individuals, according to the activity of the kidneys.

DR. BRYSON said he considered Dr. Alexander's case an extremely interesting one on account of its rarity and the skill with which it was handled. As regards the physiology of urination, he considered that the passage of urine downwards from the kidney to the bladder and subsequently through the urethra was due to peristaltic action, and that the retention of urine was due to anti-peristalsis. The condition is absolutely parallel to that existing in the rectum. We have involuntary muscular fibres, controlled to a certain extent by voluntary muscular fibres. Both mechanical and physiological problems are involved in the question, and it is difficult to separate one from the other.

DR. CABOT referred to the advisability of getting at the ureters by means of an intra-abdominal operation rather than by the supra-pubic operation.

DR. ALEXANDER said that in the case reported by him the circular fibres about the neck of the bladder were puckered up and employed to keep the urethra in a state of tone. This was found not to be sufficient to hold back the water and at the last operation the urethra was still further narrowed and the nymphæ brought together so as to press directly on the canal, thus bringing the roof and floor together, and now the girl must make a voluntary effort in order to overcome the physical pressure that exists. She is obliged to strain before she can urinate. When the bladder is very full it often happens that there is a slight flow of urine when she coughs or sneezes. The urine is retained by mechanical rather than physiological means.

¹ See July, 1892, issue of the Journal.

DR. BANGS said that in nocturnal enuresis in young girls, certain operators advise dissecting the urethra clear and rotating it completely on itself. In that way the girls had control of their urine during the night. In order to empty the bladder then, a voluntary effort must be made.

DR. ALEXANDER said that this may have had something to do with the result in his case, because the urethra was twisted on itself.

A Case of Sacculated Bladder, with Autopsy.—By DR. A. T. CABOT, of Boston.

The patient was a man 57 years old. He first presented himself in November, 1889, suffering with symptoms of stone in the bladder. As far as could be determined, the stone originated in the bladder, as the man had never suffered from renal colic. In the middle of November 1889, Dr. Cabot removed by litholapaxy a stone weighing 116 grains, composed of uric acid and urates. The man made a good recovery and was not seen again until March, 1891. He then reported that although very much more comfortable since the first operation, he was not entirely relieved of his symptoms, some frequency of urination and pain referred to the penis persisting. An examination under ether was made in March, 1891, but no stone could be touched. For further exploration a perineal incision was made, through which the finger could touch a little rough surface of stone rather high up on the posterior wall. It was made out that this bit of stone was the projecting portion of a calculus which was enclosed in a pocket, and it being impossible to dislodge it, a supra-pubic opening was made through which the stone could readily be reached. It was found to be about the size of an English walnut, and contained in a pocket, the neck of which was no larger than a small pencil, and attached to this was a little roughened bit of bone projecting into the bladder cavity. The stone was broken by the forceps and removed piecemeal. The man had a slight chill next day, with a temperature of 102, but from this time on he did pretty well until the 6th of April. At that time the urine still contained pus in abundance, and it being necessary to re-adjust the tubes, an examination was made under ether and the bladder searched, but nothing found. The temperature again rose to 102, but two days later returned to normal. The urine which had hitherto been abundant, began soon after this to diminish in quantity. It contained a little albumen; no casts were ever detected. In spite of all efforts the man gradually failed, and died about six weeks after the final examination.

At the autopsy, nothing of special importance was found except in the urinary organs. The bladder was much thickened and inflamed, the mucous membrane being highly congested and eroded in places. The wall of the bladder was not much trabeculated. The ureters on both sides were somewhat dilated and were slit up with the scissors directly to the bladder. These incisions passed directly through two pockets arranged symmetrically, one associated with each ureter, lying a little above and outside of it. One of these pockets was the one from which the stone had been previously removed. It still contained a little fragment of stone. A number of pockets, similar to those previously found, were discovered, having a very small communication with the bladder. The right kidney was somewhat shrunken, in a state of interstitial nephritis, with which was associated a pyelo-nephritis, and this condition led to the fatal result. The pyelo-neph-

ritis was no doubt secondary, and was unquestionably aggravated by the obstruction to the ureters, due to the pressure upon them by the sacculated stones. The symmetrical disposition of the sacculi and the thickness of their walls made it probable that there might be some congenital cause for them. The muscular coat ran part of the way up on the walls of the diverticuli. The fact that there were stones in but two of them, and that in one case the stone was very small, shows that they were not formed by the pressure of stones. Dr. Cabot said that this case illustrates the importance of making a digital exploration of the bladder in cases of uncertain diagnosis, where persistent symptoms continue, and also shows how much more easily such conditions can be treated by supra-pubic incision than through the perineum. He thought it better practice to crush the stone *in situ*, when it is so thoroughly encapsulated as in this case, rather than to try and free it by incision, for a considerable incision in the neck of the sac would have exposed the patient to the danger of urine infiltration and pre-vesical abscess. Finally, the possibility of the symmetrical arrangement of pockets should be borne in mind when dealing with these cases, and a knowledge of this point may lead to the discovery of pouches that would otherwise be overlooked. In regard to the position of diverticula of the bladder, Orth says that they are situated preferably on the sides and base of the bladder, and also on the posterior wall. They are either congenital or acquired. In the acquired form the condition is a hernia of the mucous membrane between enlarged bands of muscular tissue. Only when they are small can a part of the muscular coat still be shown in the wall.

DR. BANGS stated that he has seen sacculations in the bladder containing stone, which he has always regarded as secondary. In one case he laid open the sac and removed the stone. He reported another case—that of a physician. The man had suffered for several years with retention of urine, due to a tight filiform stricture. On one occasion, in attempting to relieve himself in the ordinary way, he failed to do so, but at the same time he experienced a sense of relief from his desire to pass urine and felt a sharp pain in the abdomen. A diagnosis of ruptured bladder was made, but before an operation could be undertaken the man was dead. The autopsy revealed a tight stricture of the urethra. The bladder wall was hypertrophied and contained minute sacculi in which stones were imbedded. One of these sacculi had ruptured. These sacculi, Dr. Bangs said, he thought were of the acquired form.

DR. BRYSON said he considered it strange that these acquired sacculi—or hernie of the mucous membrane of the bladder—were not more common than they are, as the conditions are often so favorable for their development. You have the internal vesical pressure evenly distributed over the mucous surface, with some portions of the muscular coat weaker than others. The muscular fibres separate and the mucous coat sinks in, and so you get a hernia of the bladder wall. Dr. Bryson said he has never seen these pockets form in a tuberculous bladder, which he considers due to the fact that vesical atony invariably exists in such cases.

DR. CHESMORE said that the case recited by Dr. Cabot offers an explanation for those cases in which the introduction of the catheter into the bladder apparently dislodges stone.

DR. BRYSON said that a pocket filled with thick mucus offers an opportunity for the rapid re-formation of stone. In one case he was able to lo-

cate the pocket and crush the contained calculus with the lithotrite, but the fragments were so fairly stuck together with thick, gelatinous mucus that it was impossible to remove them with the aspirating tube, and he was obliged to dissolve them with the salicylic acid solution.

DR. PALMER said that several years ago a man came to him with supposed stricture. The instrument introduced was caught and could not be closed, and the obstruction was found to be due to a stone. A perineal operation was then performed, and in three sittings thirty-six small stones were removed, all from the prostatic sinus. The supposed stricture proved to be multiple calculi of the prostatic sinus and the membranous urethra. Not one of them was in the bladder, although they may have been washed out from there.

DR. CABOT said that in one case that had been examined by him, as well as by Dr Bigelow, without finding anything, the man returned in a fortnight and showed nineteen stones that he had passed. They were all of moderate size and had the appearance of having been enclosed in pockets. In another case he succeeded in extracting fifty or sixty stones at the first sitting, all of which were very small, like canary seed. Two weeks later thirty more stones were passed, and later on still more. The man has since remained free from stone.

DR. R. W. TAYLOR exhibited a rubber syringe made by the Butler Rubber Company. It is, he said, an exact reproduction of the Leiter Syringe, and he has found that it works very smoothly after six months' trial. It is considerably less expensive than the imported instrument.

The Pigmentary Syphilide.—By DR. ROBERT W. TAYLOR, of New York.

The history of the pigmentary syphilide, Dr. Taylor said, is a most peculiar one. It is an affection which, at first, was clearly and sharply described, but which, in the course of time, has been rendered so obscure that to-day very few have clear and precise ideas as to its course and its nature. In the whole range of syphilology there is not a like instance in which the knowledge of a manifestation of syphilis has become so progressively obscure, and in which so much confusion has been interjected by reason of the successive additions to its literature by many writers.

The pigmentary syphilide is a unique, well-marked affection, having a sharply defined pathological basis, and a course attended by well-demonstrated morphological changes. Secondary pigmentations and leucodermatous conditions occurring in the course of syphilis as relics or sequelæ of lesions, chiefly secondary, are in no sense examples of the pigmentary syphilide; they are simply dyschromatous accidents, and not sharply defined, essential affections. The primordial pigmentary anomalies due to syphilis consist essentially in a hyper-pigmentation, which may, in whole or in part, be replaced by a corresponding loss of color, or leucodermatous condition. This primordial hyper-pigmentation is the essential pigmentary syphilide. It is seen in three well-marked and quite distinct conditions:

1. In the form of spots or patches of various size. These consist of round, oval or irregular plaques which may have sharply defined borders, or their margins may be dentated or jagged. Their color varies from a light brown *café au lait* to even a quite deep brown tint. They are unaffected by pressure and the condition of the circulation.

2. As a diffuse pigmentation of greater or less intensity, which sooner or later becomes the seat of leucodermatous changes, in the shape of small spots which gradually increase in size. This is the retiform pigmentary syphilide—the pigmentary syphilide *à dentelles* of Fournier.

3. In an abnormal distribution of the pigment of the skin, in which, owing to the lack of or crowding out of the pigment in places, they become whiter, while the parts invaded in the abnormal distribution become darker; in this way a dappled appearance is presented. This form has been termed the marmoraceous, from its resemblance to some kinds of marble in which there is an intimate interblending of light and darker colors. This marmoraceous pigmentary syphilide is not common, and it is peculiarly liable, by reason of its delicacy of tone and tint, to pass unobserved.

DR. P. A. MORROW, of New York, said that he has seen a number of cases of pigmentary syphilide, which we all recognize as a comparatively rare affection. It is essentially a dyschromia of the skin. Whether the leucoderma is primary or secondary, he does not think has been definitely settled. Many still claim that the essential process is an achromia, and that the clinical features are very similar to those seen in leucoderma, where, for example, there is a central patch of white skin with a markedly pigmented periphery. If it be essentially a hyperchromia, it is rather a new lesion—that is, it does not behave like other lesions of the skin. Dr. Morrow said that he is inclined to take the same view of the case that Dr. Taylor does, namely, that the essential process is hyperchromia, and that the white spots which form so characteristic and typical a feature of it are secondary. It is possible, however, that these two processes may be synchronous; that they may be developed simultaneously. He considered the eruptive process of very little clinical significance, because of its comparative rarity.

DR. JOHN A. FORDYCE said he has been on the lookout for a primary pigmentary syphilide for a good many years without seeing one. Of the second variety mentioned by Dr. Taylor—called by the Germans leucoderma syphilitica or pseudo-pigmentary syphilide—he has seen a good many. In these there appears to be a loss and increase of pigment. He felt sure, however, that the loss of pigment occurred over a previous syphilitic lesion, while the increased pigmentation took place at the periphery of the white spots, and was secondary to the former. He thought Dr. Taylor had presented the matter in an excellent clinical way, and hoped that his paper would help to set the question right.

DR. TAYLOR, in closing the discussion, said that he first called attention to the leucodermatous changes in these lesions in 1876. In the cases he described in his paper he had watched the process from beginning to end. In some cases you will find that the whole brown expanse is formed before atrophy takes place; in others the atrophy does not occur at all.

The Pathology of Syphilitic Nephritis.¹ By DR. JOHN A. FORDYCE, of New York.

DR. TAYLOR said that the subject of syphilitic nephritis is yet in its infancy. We know that kidney affections sometimes come on during the course of syphilis, and then the question arises whether it is due to the syphilis or to some other infection. We have only reached the threshold of

¹ Will be published.

this subject, and it is through investigations such as Dr. Fordyce is engaged in that we can arrive at any conclusions.

DR. P. A. MORROW said that the subject of nephritis, in its connection with syphilis, has been rather neglected by the specialist. We know that nephritis does occur in the course of syphilis more commonly than is generally supposed. As regards the treatment of syphilitic nephritis, Dr. Morrow said that his experience with the use of mercury had been very contradictory. In two or three cases the renal symptoms were apparently aggravated by the drug; in another case he obtained brilliant results.

DR. E. L. KEYES said that he had never made any special study of this question. He has seen a number of cases where albumen appeared in the urine in early syphilis, and his impression is decided that the mercury treatment is of advantage. He considered Dr. Fordyce's investigations in this field as valuable.

DR. R. W. TAYLOR said that he is in the habit of examining the urine in cases of syphilis, and that the percentage of cases in which there is kidney involvement during the secondary stage is perhaps 3 per cent.—certainly not more than 5. As regards treatment, the lesion is of an inflammatory character, with small cell infiltration around the vessels, and the mercurials properly directed will be of benefit.

DR. BRYSON said he also has seen a syphilitic nephritis benefited by the use of the mercurials.

DR. FORDYCE said that in the case reported by him, the disease would not respond to the use of mercury. He had given the drug internally, by inunction and by other means. There are a number of cases on record where a syphilitic nephritis has become worse through the use of mercury, although it is the rule for improvement to result from the use of this drug.

Observations in Regard to the Pathology and Pathological Anatomy of Nodular or Granular Cystitis; Preliminary Paper.—By DR. SAMUEL ALEXANDER, of New York.

Treatment of Cystitis.—By DR. W. K. OTIS.

The writer referred to the importance of using local treatment in the common forms of cystitis, a point which is overlooked by many of the general practitioners. As a rule, local treatment is not required immediately, but at the same time Dr. Otis said he has seen a great many cases where the instillation of silver nitrate solution into the prostatic urethra produced an almost instantaneous cessation of pain and frequent urination. As soon as the cystitis becomes somewhat sub-acute, he is in favor of using the treatment recommended by Ultzmann, beginning with mild solutions of silver nitrate, filling up the whole bladder, by which means you cure a zone of inflammation which extends from the prostatic urethra into the bladder; this can be followed in about a week by stronger installations of the drug. In a number of cases, Dr. Otis said he has followed the method advocated by Guyon, using the bichloride of mercury solution instead of the silver nitrate, and the results obtained have been very satisfactory. In the chronic cystitis of old men he has had good results from the use of the salicylic acid solution recommended by Dr. Bryson at the meeting last year. He has found it exceedingly useful in those cases where there is a good deal

¹Will be published.

of mucus. Dr. Otis also spoke of the latest method of treating cystitis, namely, by making direct applications to the sore spots by means of the galvano-cautery or caustic, with the aid of the cystoscope. In its present form, he did not consider it of much value: the hemorrhage which results interferes with the local applications, and he thought it a better plan to open the bladder at once and treat the lesions in that way.

Dr. PALMER, in discussing Dr. Alexander's paper, referred to the function of the lymphatics in carrying off the over-plus material left in the process of nutrition. Any condition of perversion or inflammation, no matter what its etiology may be, calls upon these structures for an increased amount of activity, and this results in the development of these nodes or nodules.

Dr. KEYES referred to the thickened patches of tissue sometimes found about the trigonum and in other parts of the bladder, which can be seen with the cystoscope, and which he thought were included in the category mentioned by Dr. Alexander. He has often had a suspicion that these growths were of a semi-tuberculous nature.

Dr. BRYSON inquired whether a bacteriological examination of these growths was made?

Dr. ALEXANDER replied that up to the present time nothing of any importance has been done in that line. The subject is being worked up, but he is not yet prepared to give his results. Prezwoski has made some investigations in that direction; he found various forms of bacteria, like a mixed variety of streptococci and micrococci, but these were only found in the upper layers of the mucous membrane and were probably accidental.

Dr. BRYSON said that any work in the direction of differentiating the various forms of cystitis, of which we are in the habit of speaking as if they were all the same, is a most thankworthy task. To give bichloride injections in a case of tubercular cystitis is not going to do good, but harm. Dr. Bryson expressed his high appreciation of the value of Dr. Alexander's investigations, and said he would look forward with a great deal of interest to the final settlement of the question.

Dr. BANGS said that in the future he would regard the papilloma of the bladder—as he has been in the habit of calling them—of more pathological significance. He has always looked upon them as nature's effort for repair, in the same way as granular tissue is thrown out. He has contented himself with scraping them, or in some cases treating them by local irrigation. If, as has been suggested, these may yet prove to be a form of tuberculous infiltration, then the clinical picture he has had in regard to them still holds good, because we know that tuberculous foci are healed by a fibrous wall being thrown out.

Dr. CABOT said that Dr. Alexander had presented this subject in a new light, and that he would look forward with much interest to the publication of his full paper.

Dr. ALEXANDER presented some new instruments for the purpose of collecting pus from the urethra and bladder for bacteriological examination.

Unusual Microscopic Bodies Found in the Secretions and Urinary Sediment of a Patient Suffering for Seventeen Years with Urethral Discharge.¹

—By DR. F. TILDEN BROWN, of New York.

¹Will be published.

DR. KEYES inquired whether the patient had ever been put on turpentine?

DR. BROWN said he had not.

DR. CABOT asked how the parasite compared in size with the *filaria sanguinis hominis*?

DR. BROWN replied that they were considerably larger. The largest one was about three millimeters in length; the average size was about one millimeter. The tail was pointed; there was no segmentation of the body. The specimen was very difficult to stain.

Relapsing Villous Papilloma of the Bladder.—By DR. EDWARD L. KEYES, of New York.

DR. KEYES said that he was not able to give a very positive opinion, from his personal experience, as to the tendency which villous papilloma in the bladder shows to relapse after thorough extirpation. He has operated upon at least five such cases, and has not observed a relapse in any of them excepting the one reported in this paper.

DR. KEYES then gave the history of a case in which he operated for villous papilloma of the bladder in November, 1886. The tumor was pedunculated, growing from a stem as large as an ordinary lead-pencil, and itself fully as large as a good sized Mandarin orange. The tumor grew from the base of the bladder, near the orifice of the right ureter. The top and sides of the bladder were entirely free from villous growth, but upon the base of the bladder, on the left side, and extending forward nearly into the vesical neck, there was a flattened, velvety villous growth, occupying perhaps an area of nearly a square inch. The tumor itself was extracted, and this area scraped with a sharp spoon, and the bladder left, as far as could be ascertained, in a healthy condition. In 1888 the man's symptoms returned and gradually grew worse. In January, 1892, another operation was undertaken, it being proposed to open the bladder above the pubis through the original scar. On account of the firm adhesions of the peritoneum, however, this route was abandoned and a perineal opening made. Upon exploring through this wound with the finger, it became clear that there were two points of villous growth within the bladder. The site of the original pedunculated tumor was healthy. From the roof of the bladder, apparently growing downwards directly from the line of the original incision, there hung a pedunculated villous tumor, about as large as a walnut, and upon the left side of the base of the bladder, at the site of the original flat villous growth, there had grown a reproduction of its former self, apparently similar in character and extent. With a sharp spoon these areas were both cleared away and the operation terminated as usual.

DR. BANGS said that he has repeated the operation of supra-pubic cystotomy on the same patients on three different occasions, and he considered the technique exceedingly difficult. In one case he ruptured the peritoneum on account of its close proximity to the bladder wall. In another case, the difficulty in going through the old cicatrix and finding the wall of the bladder without opening the peritoneum was only accomplished after considerable trouble.

DR. BRYSON said that in one case where he attempted to get down to the bladder and sew up a fistulous tract which had persisted after a supra-pubic prostatectomy, he found the tissues around the fistula extremely

dense. The peritoneum was also adherent and he was obliged to open it.

In another case he found almost the same condition existing, except that the peritoneum was not so closely adherent to the pubic bone. This was a case of tubercular cystitis, complicated by an enlarged prostate, and he decided to leave it alone rather than open the peritoneum. Dr. Bryson also gave the history of a case in which he removed a large, villous, cauliflower-like growth springing from the wall of the bladder, just posterior to the left ureteral orifice. It sprang up from a stalk which in turn had smaller stalks. The symptoms appeared just two years before the operation took place. Through a supra-pubic opening the growth was found without any difficulty, snared and removed. The bladder cavity was carefully explored, and the base of the tumor cauterized with the electro-cautery. The patient got well with the exception of a mental disturbance which was thought to be due to the use of the anæsthetic. For a month after the operation he suffered from delusions and insomnia. These gradually disappeared and he got perfectly well. About three weeks afterwards he returned and said he was bleeding again. Fearing a recurrence of the growth, Dr. Bryson said he carefully washed out the bladder and on exploration discovered a reddish patch at the point of the original growth. The bleeding gradually ceased, and the man is now perfectly well. Dr. Bryson said that if this removal was permanent, it is the first he has ever seen. Out of five cases of papilloma of the bladder which he had removed, all but this one have returned and finally destroyed the patients' lives.

DR. KEYES said he was very much interested in Dr. Bryson's case. In his case also the patient lost his head immediately after the operation. He became emotional, complained constantly and had notions of various sorts. He suggested that there might be some association between these bleeding villous papilloma and mental aberration.

DR. PALMER inquired as to the alcoholic habits of the patients. Such delirium, he said, sometimes follows operation in the case of habitual drinkers.

DR. BRYSON said that his patient was a Israelite and an exceedingly temperate man. The melancholic symptoms appeared directly after the operation, and the delusions followed two or three days afterwards. It was suggested that they might be of uramic origin. He was still under the influence of his delusions when his wife took him out of the hospital. His physician gave him acetanilide and he promptly got well.

DR. CABOT gave the history of a case, a physician, upon whom he had operated for bladder trouble. He acted strangely after the operation and it was finally necessary to have him sent to an asylum. This case is not so clear, however, as the man's relatives said that he had begun to act queerly three or four years before he was operated on.

DR. KEYES said that his patient had been a pretty steady man, never drinking anything stronger than beer. He also referred to the possible value of pyrozone in removing excrecences from the bladder wall. He had used it with success in removing pointed condylomata. It will induce oxygen to develop under the base of the papilloma, turning the tissues white in color. A flat tumor of the bladder wall can very properly be treated with this preparation.

DR. ALEXANDER said that the action of pyrozone can be stopped by adding a drop of oil.

DR. MORROW said that he has had extensive experience with the use of pyrozone in the treatment of moles and warts during the past two or three months, and that its action has been rather disappointing upon these cutaneous growths.

SECOND DAY, WEDNESDAY, JUNE 22D.

Prostato-Myomectomy by the Supra-pubic Route, with a Report of Results in Eleven Cases.—By DR. JOHN P. BRYSON, of St. Louis.

DR. BRYSON said that of the twenty-three high sections done by him, eleven were undertaken with the precise object of removing the prostatic in-growth; two were known to be complicated by calculi, in both of which cases the foreign bodies could have been removed by other means than supra-pubic section. Dr. Bryson then gave a brief history of the eleven cases in which he had operated upon the prostate.

In concluding his paper, Dr. Bryson said he would refer to two points: (1) that the more the symptoms of prostatic over-growth resemble those of a foreign body in the bladder, the more reason is there for operation; (2) in those cases in which we have a prostatic over-growth complicated by a cystitis, we get results which to his mind were astonishing. He should not now, although he would have done so in the beginning, refuse to operate on a man, no matter how intense his cystitis might be.

Perineal Prostatectomy, with a Brief Report of a New Method of Removing the Lateral Lobes.¹—By DR. WILLIAM N. WISHARD, of Indianapolis.

Prostatectomy.—By DR. WILLIAM T. BELFIELD, of Chicago, was then read in the absence of the writer by the Secretary.

Eighteen months ago Dr. Belfield had the pleasure of publishing ² a synopsis of 133 operations upon the enlarged prostate—all that he could collect both by search of the literature and by personal correspondence. As a result of the study of these cases, and of his own experience, he expressed certain conclusions which may be formulated as follow:

1. In the majority of prostaties the failure to evacuate the bladder is due not to degeneration of the vesical muscles but to the mechanical obstruction offered by prostatic growths.

2. The prostatic obstruction is usually of such form as to be overcome by operative measures.

3. These measures should secure three results:

(a) Restoration of a low-level urethra by removal of prostatic obstacles; (b) through stretching of the prostatic urethra; and (c) temporary drainage of the bladder.

4. The choice of operation is determined by the following considerations:

Perineal operations have a considerable range of usefulness, seriously restricted, however, by the mechanical difficulty in the detection and removal of the common intra-vesical growths; supra-pubic cystotomy affords satisfactory access to these frequent tumors, but sometimes fails to clear the obstructed urethra; the combined supra-pubic and perineal approach

¹ Will be published.

² American Journal of Medical Sciences, November, 1890.

seems alone to fulfil every indication in every case. From the anatomical standpoint, therefore, supra-pubic cystotomy, with or without a supplementary *boutonnère*—as the peculiarities of the prostate in a given case may require—is in the abstract *the* operation.

Yet since many patients requiring this operation are, when they reach the surgeon, too feeble to endure it; and since perineal prostatotomy is much less exhausting and perilous than the combined operation; the perineal approach should be selected for feeble patients.

Further experience confirms his belief in the accuracy of these conclusions. He is now inclined also to lay greater stress on the importance of thorough stretching of the prostatic urethra by the finger as a factor favoring the complete evacuation of the bladder. The value of this measure as a factor in the operative treatment is strongly suggested by the pronounced improvement in the evacuation of the bladder often produced, in non-operative cases, by instrumental dilatation of the prostatic urethra.

Since the publication above mentioned, he has operated upon the prostate in six cases, briefly summarized as follows:

Four of these patients were under 62 years of age; wholly or almost entirely dependent upon the catheter, but in relatively good general condition. In these the combined supra-pubic and perineal operation was made, the prostatic urethra thoroughly stretched, and prostatic obstacles removed by scissors or enucleation or both. Voluntary urination was restored in all; in three no residual urine was detected; in one less than one ounce.

In the remaining two cases, the patients, who had pyelo-nephritis, were considered too feeble for a radical operation; perineal prostatotomy was accordingly made—in one case with only local anaesthesia by cocaine. This case was not materially benefited, and died some nine months later; the other urinated more freely but still failed to empty the bladder by several ounces.

DR. KEYES said that he has operated on the prostate about twenty times. He has found that the best cases for this operation—that is, those who appear to suffer least from it—are the thin cadaverous looking men, square mouthed, with high-cheek bones, while those who suffer most are the big, fleshy men, with florid complexion. In regard to the amount of gland tissue to remove in these operations, Dr. Keyes said that he has in some instances gone forward into a large lateral lobe at least one-third the distance, and in one case one-half the distance. The collar-shaped projection is not uncommon where there is general hypertrophy of the gland. It is thick below and thin above, and in that form of enlargement he has cut above and below, tearing off both sides, and then lowered the floor. In addition to that, he has in several instances taken off about one-third on both sides, and made a funnel-shaped excavation. In one case where he did this it resulted in a traumatic stricture. He does not consider a V-shaped incision into the prostate as good as a U-shaped one, taken out with the gouge. In two cases where he attempted to remove prostatic growths by a perineal incision, he was obliged to make a supra-pubic opening as well. In regard to hemorrhage, Dr. Keyes said that with a pedunculated growth you do not have any hemorrhage to speak of, but in succulent individuals, where the growth is not pedunculated and you attempt to eviscerate it, the bleeding is sometimes frightful. In such cases it is absolutely impossible to do anything with the eye after the first incision. The operation must be

completed with the aid of the educated finger. To check the hemorrhage in such cases, Dr. Keyes said he had devised a tampon composed of a number of layers of gauze, fastened together through the centre by means of a strong silk thread, one end of which is attached to a small white shirt button, while the other end is drawn through the urethra and with this the pad is tightly drawn down into the cavity left by the removal of the prostatic tissue. Another silk thread is attached to the pad by which it can be withdrawn through the supra-pubic opening after the hemorrhage is controlled. Dr. Keyes said he did not think it necessary to make both a supra-pubic and a perineal opening, unless you desire to make the latter for the purpose of drainage.

DR. CHISMORE gave the history of a case where he made a perineal opening for the purpose of exploring the bladder. On passing the finger into the bladder, he found that the prostate was not enlarged, but the neck of the bladder was thrown into such a strong contraction that it forced the finger through it, and the man received such a severe shock that he very nearly died. The shock was caused by the finger passing through a slight nodular rising at the neck of the bladder. There was no anterior stricture; the man had never used a catheter. Dr. Chismore said he has never seen a similar condition of affairs and he could not understand it.

DR. BANGS inquired as to the death rate following operations on the prostate. He has pursued a conservative plan in treating these cases of prostatic out-growth, based upon the favorable results he has obtained in treating them by prolonged drainage. He has not seen a restoration of spontaneous evacuation of urine as the result of prolonged drainage, but the patients have been so much benefited by it that he has often felt warranted in recommending that plan of treatment instead of prostatotomy or prostatectomy. In regard to the question of hemorrhage following operations on the prostate, he thought Dr. Keyes' expedient was hardly necessary. In those cases where the hemorrhage was severe, he has succeeded in controlling it by an iodoform tampon, pressed against the wound by means of a long hemostatic clamp or sponge holder, which is kept in place by the abdominal dressing. The subsequent withdrawal of the tampon is very easily accomplished. The question of how long to continue drainage after either a perineal or supra-pubic operation Dr. Bangs said was rather an unsettled one; one man says six weeks and another three months.

DR. KEYES said that the death rate following operations on the prostatic gland was high, perhaps 25 per cent.; certainly not lower than 16 per cent. He makes it a rule never to perform the operation on a man who can possibly get along without it. The death rate of the operation is very much higher than that of supra-pubic cystotomy. The question of drainage, he thought, depends upon the judgment of the operator. In the pedunculated tumors the mucous membrane can be peeled off and left. In those that are not pedunculated he removes the mucous membrane as well as the growth. In conclusion, Dr. Keyes said that prostatectomy must be regarded as a serious operation; it is an emergency operation, not one of convenience. It should not be undertaken simply to relieve a man from the use of a catheter.

In reply to a question, Dr. Keyes said he keeps the double tubes in position for from four to eight days.

DR. BRYSON said he has done ten perineal operations for enlarged

prostate. The mortality rate is high. By tearing out these growths piece after piece, you very often get hold of one of those masses which peels off for some distance, and in this way you are apt to leave some pockets into which urine will pass.

DR. KEYES said he gets out these masses by first crushing them, then giving a quick twist, and then wrenching them out.

DR. BRYSON said that the manner in which these fibrous masses are connected with each other is extremely irregular. Sometimes they seem to be composed of simple round masses, which you can enucleate separately, but you afterwards find that they have a long attachment and are connected with one another. He did not see how any benefit could ensue from stretching the prostatic urethra. He would never consent to operate on a man who could get along with the use of the catheter. It is not an operation to be undertaken for convenience or for an aesthetic purpose. As far as the quantity of tissue to be removed is concerned, Dr. Bryson said he has of late been removing more than he did in his earlier operations, but he would be very loath to remove an entire circulatory piece, or to remove so much as to leave a large part of the gland uncovered by mucous membrane towards the vesical outlet, lest a traumatic stricture should occur. In regard to drainage, Dr. Bryson said he is in the habit of keeping the drainage tubes in until he gets fairly good urine.

The Pathology of Urethral Fever.¹—By DR. F. TILDEN BROWN, of New York.

The Influence of Asepsis and Antisepsis on the Prophylaxis of Urethral as Distinguished from Urinary Fever.²—By DR. JOHN P. BRYSON, of St. Louis.

Failure of Diuretin to Avert Urethral Fever: A Supplementary Note.—By DR. EDWARD L. KEYES, of New York.

DR. KEYES said that at the last meeting of the Society, held in Washington, he presented to the Association a paper on diuretin, in which he claimed that from his experience with the drug up to that time it appeared to possess the power of averting urinary or urethral fever. Since then he has administered diuretin freely—and used other precautions—and yet common-place urinary fever has come on and run the usual course. Dr. Keyes said he is still studying the matter, as we all are, and trusts that sooner or later an infallible prophylactic measure will be discovered. Professor Guyon and his followers have made some recent laboratory investigations on this subject. They ascribe all forms of urinary fever—*l'infection urinaire*—as they term it, from the simplest rigor to the most pernicious deadly attack, to various bacterial infections. Dr. Keyes gave the history of a case in which urethral fever, which had occurred a number of times before, was finally prevented, after deep urethrotomy, by filling the bladder with hot bi-chloride solution (1-3000), and letting the patient urinate it after the operation, as proposed by Dr. Palmer, of Louisville. He has used the bi-chloride solution many times since, alone and combined with other means, and still sometimes urethral chill follows. He knows of no positive, certain means to-day of averting urinary chill in every case, and of those remedies

^{1, 2} Will be published.

that he relies upon he considers the combination of salol, diuretin, bi-chloride irrigation and warmth in bed the best.

Further Report of the Treatment of Gonorrhœa.¹—By DR. W. FRANK GLENN, of Nashville.

Adjourned.

The following officers were elected for the coming year :

President, Dr. Edward R. Palmer, of Louisville.

Vice-President, Dr. L. Bolton Bangs, of New York.

Secretary, Dr. John A. Fordyce, of New York.

Member of the Council, Dr. John P. Bryson, of St. Louis.

Cumberland Gap, Tenn., was chosen as the next place of meeting.

Dr. Taylor's proposed amendment to the By-Laws, that "This Association shall be known as the American Association of Genito-Urinary Surgeons," was adopted.

The following resolution was unanimously adopted by the Society :

Resolved, That the members of this Association express their appreciation of the courtesy and kindness of Mr. Procter and Dr. Ransom, conveyed in their invitation to inspect the Richfield Springs Bathing Establishment ; and, further, they desire to place on record their gratification with the admirable arrangements and complete appointments of this establishment.

NEW YORK DERMATOLOGICAL SOCIETY.

215TH REGULAR MEETING.

DR. GEORGE H. FOX, *President, in the Chair.*

Syphilis and Epithelioma.—Presented by DR. GEORGE T. ELLIOT.

Female, age 49 was first seen November 16, 1894. She stated that she was married at age of thirty, and the products of her marriage were one still-born child and one miscarriage. She can give no history of cutaneous troubles previous to eight years ago. Then an eruption appeared on left cheek, which healed up, leaving cicatrices. New lesions have appeared several times since then in the vicinity of the former ones, and the last relapse began in the Fall of 1890, near the nose. One year previously she had married a second time and also had passed the climacteric. When Dr. Elliot saw the patient, the process had advanced from its original starting point, occupying the ale and the lateral surface of the nose almost as far as its dorsum. The appearances were typically those of an ulcerating superficial gummatous syphilide, the ulcerations being covered with thick crusts. On the cheek were grouped superficial cicatrices left by former lesions. The patient was physically in good condition, but complained of headaches. She was given mixed treatment (HgCl₂, gr. 1-24th ; KJ, grs. XV, t. i. d.), alone. Improvement was marked and immediate, the ulcerations healing rapidly, and by the middle of January the appearances as we see them now, alone remained. Since then, notwithstanding energetic specific treatment, internal and local, aristol and mercurial ointment, as well as mercurial plaster, there has been practically no change. The existing conditions are, a cicatricial

¹ Will be published.

surface bounded by a more or less elevated, pale and waxy margin, on which angiectasia is seen. The margin extends deep into the derma in certain places, and is densely indurated and very sharply defined. The induration is so marked that the ala feels almost cartilaginous along its border. There are also ulcerations here and there along the elevated border, the granulations in which are hard and resistant. The patient's symptoms are shown as representing those of an epithelioma which has developed on a syphilitic base and has co-existed on the same surface with the lesions of that disease.

DR. MORROW said it was not unusual for epithelioma to develop upon a syphilitic base, especially in syphilis of the tongue. He asked if Dr. Elliot had subjected the patient to a prolonged use of specific treatment?

DR. ELLIOT said since November 1, 1891.

DR. BRONSON referred to the difficulty in differentiating syphilis and epithelioma. He said that in certain gummatous ulcers the edges become indurated and very closely simulate epithelioma.

DR. MORROW mentioned a case which had recently been under his observation, of syphilitic ulceration of the face, in which the edges of the ulcer were hard and simulated very accurately a rodent ulcer. The fact that one of the children of the patient had a dactylitis, suggested the probably specific nature of the lesion and under the continued use of specific treatment the ulcer cicatrized.

DR. ALLEN had seen syphilitic ulcers simulate epithelioma so closely that he would not make a positive diagnosis of the latter affection until he had given a prolonged trial to iodide of potassium, Zittmann's decoction, and the local use of mercurial plaster.

DR. LEWIS remarked that in his experience when epithelioma developed from a syphilitic base, it was at a comparatively late period in that affection. He believed that when a patient with cancer was subjected to specific treatment, the cancerous growth developed with greater rapidity; this was especially noticeable in cancer of the tongue.

DR. ROBINSON said that by gas-light he would not make a positive diagnosis of cancer. Although the base of the ulcer was much indurated, he did not find the waxy margin.

DR. FORDYCE referred to a neoplasm of the upper lip and wing of the nose which had been under his observation several years before. On the supposition that the growth was syphilitic, the patient had been subjected to the prolonged use of mercury and the iodides without avail. The tumor was removed by operation, but a recurrence took place. Clinically, the case presented every appearance of epithelioma. On his own responsibility the patient began taking drachm doses of the fluid extract of red clover (*trifolium pratense*) three times a day. This medication was soon followed by an improvement and within three or four weeks by a complete cure of the affection. He had tried the drug since in a number of cancerous affections but without result.

DR. ELLIOT said in closing that by day-light the waxy margin of the ulcer was distinct. Under local and internal specific treatment, the case, had at first improved very greatly, the gummatous ulcerations had healed in a few weeks, but then the present appearances had become apparent. Since the beginning of January energetic syphilitic treatment internally and the local use of mercurial plaster had been persisted in, but nevertheless there had been no change in the condition.

Lichen Planus in a Negro.—Presented by DR. FOX.

The characteristic color of the lesions, Dr. Fox said, could readily be seen by daylight. Some of the nodules upon the abdomen had softened and were converted into pustules.

DR. ELLIOT stated that he could not understand why so much stress was laid on the color. He found that the color varied according to the location of the lesions and the acuteness of the outbreak. He had seen many cases of the acute milium lichen planus in which the lesions were all pink or light red and also frequently others in which the papules were typical of the disease, but located on the upper extremities and here also the lesions were light red and without the purplish tinge. This color which was called characteristic, he would see on the lower extremities, or in cases which had existed a long time, were chronic in the course, but in his experience, the exceptions were so numerous that he did not think the term "characteristic" could be attached to the purplish color.

DR. BRONSON thought the color was a characteristic feature of the disease, and corresponded to the color in old syphilodermata. Cases that are attended with long continued hypæremia present the peculiar change in the color of the skin.

DR. FOX said that the violaceous color was not present in all cases, but there is a peculiar tint which is quite characteristic of the disease, and which is seen in the larger number of cases. He had been able to make a diagnosis by the peculiar color in many cases.

Urticaria Pigmentosa.—Presented by DR. LUSTGARTEN.

Patient (Stolz), 22 years of age, native of Germany, blond, blue eyed, of medium size, but well developed. As his general health is perfect and as there is complete absence of family history also, his case does not help us to elucidate the ætiology of this rare affection. The disease began in early childhood and shows the typical characteristics with regard to distribution, formation of wheals, pigmentation, etc., as first described by the English authors, to whom we are indebted for the knowledge of the clinical features. Bullous or vesicular eruptions are absent and as far as he remembers, have always been absent. Rather uncommon is the long duration, as in nearly all the cases published the disease has faded away before puberty was reached. A microscopic examination may be obtainable at a later date, the results of which will be communicated to the Society.

DR. MORROW said the case was interesting from the very profuse development of the lesions and from the fact of its chronicity. He did not recall any case that had existed for so long a time. When cases of this disease first attracted attention, the impression prevailed that they ultimately proved fatal. He understood that the patient died whose case he had reported some years ago. In many of the cases reported factitious urticaria has been present not only on the portions of the skin involved in the disease, but also on the sound skin.

DR. FOX said all the cases that he had previously seen had occurred in children, and the lesions were fewer and larger. He had never seen a case in a patient of this age where the lesions were so numerous.

DR. LUSTGARTEN said the cases reported by Sangster, Tilbury Fox, Colcott Fox and others were in children, and the disease began shortly after birth. The clinically different form of urticaria described by Kaposi in

which pigmentation of the skin follows the occurrence of wheals should be separated from the disease and better called urticaria cumpigmentation.

DR. ELLIOT referred to the case in an adult which he had presented to the Society some months before. He had found on microscopic examination the same arrangement of the *mast cells* as had been described in the typical urticaria pigmentosa beginning in children.

Tuberculous Ulcer of Tongue.—Presented by DR. ROBINSON.

Male, aged 44 years; married; cabinet maker. No family history of tuberculosis. Never had syphilis or any eruption upon the skin. Lesion commenced on point of tongue over three years ago. In January, 1890, point of tongue was removed at Roosevelt Hospital. At that time the lesion was about the size of a pea. The wound never healed. Came under Dr. Robinson's care in November, 1890. Thought it was possibly syphilitic and treated him with iodide of potassium for some time, but without any noticeable improvement.

Primary Tuberculous Ulcer of Tongue.—Presented by DR. ROBINSON.

Jacob S., aged 24, single, stair-builder. Never had syphilis and never had any eruption upon the body. Nine months ago he noticed a small lesion upon the point of the tongue. It appeared as a small, hard lesion about the size of a pin-head, grayish in color, and was slightly painful when touched by food, etc. It commenced on the point of the tongue a little to the right of the median line, and later also another on the left of the median line. The two lesions gradually became larger and have never healed since their origin. The pain has never been marked at any time. At present this ulcer occupies the apex of the tongue, somewhat oval in shape, about three-quarters of an inch from above downward. The base is reddish in general appearance, like the floor of a granulating wound, having an irregular surface consisting of many pin-head or smaller reddish points, between which there is a grayish, yellow material consisting of pus corpuscles, serum and broken down tissue. It bleeds easily upon touching with a blunt instrument and is not hard, like in an epithelioma. The margin is irregular, and the edges are perpendicular, except at one point to the right, where it is undermined. The tissue forming the margin is elevated, not very firm in consistence, not waxy in appearance, is reddish in color, about one-eighth of an inch in diameter and not very sharply limited. Outside of this somewhat limited elevated margin, the tongue is in an apparently normal condition, except to the right there are two pin-point whitish lesions—small ulcers—about one-tenth of an inch apart and one-eighth of an inch outside the ulcerated edge of the large ulcer. No enlarged glands about jaws. Six weeks ago he contracted a severe bronchitis which is now almost gone. At that time he weighed 180 pounds, the same as he weighed before the appearance of the ulcer, but at present weighs only 165 pounds. This weight he lost in six weeks and before that time he felt perfectly well, having a good appetite, no cough and lost no flesh. At present he has a poor appetite and a slight cough. Has broncho-vesicular breathing at left apex with some elevation of temperature and increased heart action. No râles. Has marked wavy breathing.

DR. ELLIOT could corroborate the diagnosis in one of the cases. He had examined microscopically, a piece from the patient's tongue some weeks ago.

He had found no bacilli, but the histological structure of the growth indicated in a typical manner tuberculosis.

DR. ROBINSON has not found bacilli in the patient's sputum but out of forty sections he had found bacilli in a few. He believed the first case was a primary tuberculosis of the tongue as the patient has remained in excellent health since the local trouble began nine months ago until the attack of bronchitis six weeks ago.

Since the attack of bronchitis he has lost in weight and presents evidence of a beginning tuberculosis of the lungs.

Alopecia Areata.—Presented by DR. ELLIOT.

The patient is a female, age 24. She states that she had her first attack of the process six years ago. She then lost all the hairs on the scalp. At the end of some years it had grown again and remained natural until last November (1891) when the hairs again began to fall out. At present the scalp is quite denude of hairs, and there are also patches in both eyebrows. The interesting point about the case is that after every headache or indisposition of any kind whatsoever, there is an increase in the morbid symptoms.

DR. MORROW referred to a case under his observation which seemed to show that the condition of the general health had a marked influence on the alopecia. The patient had improvement and relapses, and in each instance the relapse could be traced to excessive work, mental strain, or unfavorable hygienic conditions. The patient did not suffer from headaches.

DR. ELLIOT spoke of a case he had seen some months previously, which seemed to strongly support the neurotic theory of the affection. A man suffered intense pain for twenty-four hours before it was opened, from an alveolar abscess of the right lower jaw, twenty-four hours later he had a patch of alopecia areata on the same side as large as a fifty-cent silver piece. It enlarged slightly for a week and then remained stationary. Later the hair began growing again.

Enormous Number of Fibromata Mollusca.—Presented by DR. BULKLEY.

Mrs. F. H., aged 42, a nurse in the Skin and Cancer Hospital, has for eighteen years noticed the development of large numbers of small tumors beginning upon the chest and gradually increasing in number until the entire upper portion of the body is covered with hundreds of small tumors, from the size of a small shot to that of a pea. Of late they have begun to form on the arms, and hands and face. An interesting feature is the points on the arms where the tumors are forming by the occurrence of small, depressed atrophic spots, which can be readily felt, through which the tumors later protrude as a hernia of the connective tissue beneath. The tumors are mostly pedunculated, but newer ones are sessile.

DR. TAYLOR said the case illustrates the retrogressive stage of fibroma molluscum. After the tumors have pushed their way through the overlying skin, their bases are not infrequently constricted by the surrounding tissues causing them to undergo atrophy. The sac which contained the tumor and which is merely a membrane of fibrous tissue, often remains for a long time as was seen in the case presented.

DR. FORDYCE referred to a case of multiple fibroma-molluscum tumors which was under his observation. In addition to the tumors situated in the

skin, there were present a number of deeply situated, extremely painful tumors, one of which he had removed. It was encapsulated, about the size of a pigeon's egg, and rested on the tibialis anticus muscle. A microscopic section showed the absence of nerve tissue, and the tumor to be a fibromyxoma; the fibrous tissue was extremely dense at the centre of the growth.

Items.

Aristol for Venereal Ulcers as a Substitute for Iodoform.—DR. GUNTZ (*Memorab.*, Jan. 23, 1892).

The writer says aristol should not be used in the form of an ointment, but should be applied directly to the wound. It is insoluble in water, but forms a tough brown pap with olive oil, which is, however, difficult of application. The undissolved powder itself is inert. Therefore, the ulcer should be strewn with powder, and a drop of olive oil be allowed to fall slowly from a glass rod upon it. Without waiting for the solution to be effected, the ulcer is promptly covered with some fine impermeable tissue, under which the solution takes place slowly. No cotton or charpie should be applied to the ulcer. If the secretions are very profuse, or if the ulcer is in an unfavorable location, this dressing must be secured by means of court plaster. The application should be renewed twice daily, after careful removal of that previously applied. Its advantages are that it is painless, odorless and non-irritating, and that there are no inconveniences attaching to its use. Painful ulcers become painless, and previously bedridden patients become able to go about after its use. If, however, as is the case in corroding or torpid ulcers, the healing tendency is not sufficiently rapid, recourse to iodoform must be had.

Although aristol is not curative in soft chancres, nevertheless, where it is substituted for iodoform, there is no danger that the lesions will assume a more serious character. This happens frequently when mercurial ointments are used. In hard chancres its action is better. But it is of especial value in secondary lesions, in ulcerating gummata, in tubercular syphilides, etc. Although if continued long enough, this treatment will effect a cure, nevertheless it is hastened by the internal administration of anti-syphilitics.

Dr. Gould's Prize Essay.—Dr. George M. Gould of Philadelphia offers a prize of \$100 for the best essay on quackery, subject to the following conditions:

The essay should not contain over 15,000 words, and in simplicity and directness should be adopted to the commonest lay understanding.

Papers should be sent to Dr. Gould on or before January 1, 1893, type-written, without the name of the author, but accompanied by a sealed letter, giving the author's *nom-de-plume*. The essay will be given to a competent committee, and when their decision is reached the sealed letter of the author will be opened, and the prize sent to the winner.

The essay will then be cheaply but well printed in large quantities, and supplied physicians at the cost of printing.

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Original Communications.

INFLUENCE OF ASEPSIS AND ANTISEPSIS ON THE PROPHYLAXIS OF URETHRAL AS DISTINGUISHED FROM URINARY FEVER.

BY

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St. Louis.

FROM 1876 to 1886, urethral fever was extremely common in my practice; so common, indeed, that when proposing for operation on, or considerable instrumentation of, the urethra I was accustomed to examine a patient with the view of determining how well the chill and subsequent fever would be borne. From 1886 to 1888 a considerable diminution in frequency was noted; and in the past four years, there has been such a reduction in frequency that a urethral chill and fever now causes surprise and results in a careful overhauling of the various steps in the prophylaxis and operation stages. Moreover this gradual diminution in frequency in the second period and sudden fall in the last, has occurred in face of an increased number and greater severity of operations. Within the past three years, three urethrectomies for stricture with suturing of divided ends and one urethrectomy with transplantation have been done without any urethral or other fever, a thing which would have been impossible to me before 1886, and highly improbable after that and before 1888.

I may note here, that this arithmetical retrogression in frequency has proceeded in a perceptible relationship with

changes in the technique of urethral antiseptics and is not in any way connected with internal medication or operative method.

During the first period named above, the most careful attention to the state of the alimentary canal, the kidneys, skin, heart and lungs, combined with the orthodox administration of quinine, iron, arsenic, aconite, belladonna, pilocarpine and morphine seems, on looking back now, to have accomplished almost nothing. Nor did these means with surgical cleanliness of instruments—in the latter part of this period—avail anything perceptible to me. The first ray of hope dawned when with rigid cleanliness of hands and instruments was combined the internal administration of such antiseptic drugs as salicylic, boric and benzoic acids, which reach the urinary passages by way of the kidneys, and the present comparative immunity distinctly coincides with the adoption of a method of antiseptic washings of the anterior and posterior urethra; so that, in a word, the present quite satisfactory immunity is due to urethral antiseptics and instrumental asepsis.

The plan pursued by me at present is as follows:

1. When it is possible, some one of the urinary antiseptics is administered by the mouth for twenty-four to forty-eight hours before any manœuvre is done which might excite urethral fever. I do not lay great stress on this; the most that can come of it being a diminution of the pyuria in certain cystitic or ureteritic conditions. Reliance cannot be placed on it to considerably diminish the fever. It is more efficient for disinfection of the upper and middle portions of the urinary passages than for the urethra, since the drugs, in weak solution, remain longer in contact with these membrane. Boric acid (first suggested by Dr. E. R. Palmer for this purpose) appears to me to be more efficient than the benzoates or salicylates. Salol, highly spoken of by White and others, has had no effect whatever in my hands.

1. All instruments are rendered aseptic by boiling in soda solution.

3. Borated glycerine alone is used as a lubricant. All fats, oils and the more common vaseline are banished entirely. The reasons are obvious. With its affinity for water, glycerine can be easily and completely washed from the rough surfaces and slots of all instruments. It remains clean and must be kept in a closed vessel, else it quickly becomes too thin for a lubricant by absorbing moisture. It is a clear fluid, which permits infection to be noted in its opacity when it can be discarded.

When brought in contact with the urethral mucous membrane, its affinity for water causes an outpouring of fluid which flushes the mucosa even in its depths, promoting absorption at the same time. The boric acid prevents decomposition of the secretions excited. On the other hand, it is practically impossible to keep vaseline and the like substances clean mingled with blood, it is difficult to wash them away even with soap and hot water, they dry in the slot of a urethrotome or in the pocket behind the eye of a catheter and become gummy and almost impossible of removal.

4. Before any instrumentation the foreskin is retracted and the glans and prepuce are thoroughly washed with the boro-salicylic acid solution of Thiersch.

5. The nozzle of an ordinary rubber injection bulb filled with the same solution is then introduced into the meatus, the slack caught up with thumb and forefinger and the anterior urethra filled and allowed to empty itself several times.

6. With the meatus firmly compressed around the nozzle an attempt is now made to wash the posterior urethra by over-filling the anterior part and maintaining the pressure long enough to overcome the compressor. Failing in this, an Ultzmann's syringe point is introduced fully within the grasp of the compressor and the posterior portion of the duct washed backwards into the bladder.

To sum up, an attempt is made to practice urethral asepsis by preventing the introduction of septic material into the canal and antisepsis by washing both the anterior and posterior parts of the duct clean of its own secretions.

I repeat, that it is only since I have adopted all of these methods of asepsis and antisepsis, that a comparative immunity against urethral fever has been obtained.

For quite three years now, I have paid little and often no attention to washing the bladder preparatory to an operation on the urethra, this being done now, only when a catheter is about to be tied in for drainage. If the purulent urine which is shortly to flow over a fresh cut derives its pus from the kidney or its pelvis or the ureter, vesical irrigation is of no service whatever. If the pyuria is of cystic origin, the advantage is only slight and temporary at best; for quite as soon as the bladder will fill to such extent as to require urination, the pus will have formed so as to cloud it. Moreover, we constantly see purulent urine flowing over fresh surfaces as I shall presently point out without exciting urethral chill or any form of fever,

doing in fact no more damage than the clearest normal urine does.

What has been said will not, however, hold good unless we make a distinction between "urethral" and "urinary" fever: a distinction quite possible now that the bladder has been frequently attacked by the supra-pubic route and since renal surgery has lately been so far advanced. In other words, we have now a class of wounds, other than perineal and urethral, over which urine—often loaded with pathological products—is permitted to flow for a considerable time, a study of which in relation to urethral fever will enable us to elucidate some at least of the heretofore puzzling questions of ætiology and pathology. It would seem that such a study will permit us to at least limit the anatomical field over which investigation of the ætiology of urethral fever may extend to the urethra, and to eliminate the bladder, ureters and kidneys entirely.

Dr. Paul Thorndike¹ has recently summed up the evidence at hand at present in regard to those constitutional disturbances which are apt to follow the introduction of an instrument into the male urethra, and classifies them as follows:

1. Cases of "urethral shock,"
2. Cases of "acute urinary fever," probably caused by absorptions of poisonous products from the urine; these acute attacks recur without any known cause, such as further instrumentation.
3. Cases of "chronic urinary fever" coming on after catheterism in cases in which for a long time obstruction disease in some form has pre-existed.
4. Cases of "septic infections" from an unclean instrument. This may be merely a mild cystitis, may extend upward and cause septic trouble in the kidney, or may manifest itself as a true general septicæmia or pyæmia.

Though this classification is made entirely from the clinical standpoint, it at once eliminates an element of confusion that entered into all the writings of the earlier observers, namely, the nervous element in the causation of the fever. Since we so commonly see this "urethral shock" occurring without being followed by any fever whatever, we can not, even by the post hoc ergo propter hoc argument lay the fever at the door of either nervous or circulatory disturbances; a very great advantage, since at one time the controversy waged hotly around this point. This leaves the second, third and fourth forms of con-

¹ The Medical News, August 1, 1891.

stitutional disturbances to sepsis, either chemical or schizomycotic, or a combination of the two.

As a further simplification it seems now possible to call the second form "urethral" instead of "acute urinary fever," and thus leave the name "urinary fever" to the third form whether or no we qualify it as acute or chronic. Clinically the two forms have nothing in common, though they may in certain cases be intermingled, or the one may follow the other according to the relationship of their respective ætiological factors.

The sharp chill, the rapidly mounting temperature, the hot skin quickly bedewed with perspiration and this followed by drenching sweat and defervescence by crisis, clinically set this form of constitutional disturbance apart and by itself. Separating it from other forms which may precede it or follow it, or which may have in it a helping hand, we have a manifestation such as might well be made by a drug or a toxine injected into the circulation and incapable of reproducing itself within the fluids of the body. There are good reasons also for believing that the anatomico-ætiological field for this poison is the urethra, and not any other part of the uro-genital tract. These reasons may be summed up with sufficient brevity for the limits of this paper as follows:

1. Not uncommonly we see a calculus form in the kidney or its pelvis, burrowing a bed for itself, eroding the part of its protective epithelium, making a true ulcer favorable for the absorption of the urine often laden with the products of inflammation. Later on, this calculus drops into the narrower portion of the duct, becomes impacted, and being driven on by the urine at high pressure and the ureteric peristalsis, lacerates the mucous membrane, leaving behind it a constantly increasing surface from which absorption may take place. Here we have the most favorable condition for "absorption of urine loaded with the products of inflammation and mingled with blood," namely, an ulcerated surface and a freshly lacerated mucous membrane, with urine in contact under high pressure. We have also the shock caused by the pains of lead colic. But the sequence of chill, fever, sweating and rapid defervescence which we denominate urethral fever is absent.

2. Or we may go further: the concretion drops suddenly into the bladder with relief of all the first series of renal and ureteric symptoms. There is a free flow of purulent and bloody urine. The concretion does not pass by the urethra but remains in the bladder and growing sets up a calculus cystitis.

The conditions of inflammation, erosion, bleeding, contact often under high pressure, as in the vesical tenesmus, of urine cloudy with pus and pinkish with blood, with often enough pain sufficient to produce shock. Yet the clinical symptoms of urethral fever are not elicited.

3. Later on, in the same case, it becomes necessary to pass an instrument. A hollow stone-searcher is introduced, the calculus demonstrated, the urine withdrawn and even the bladder is washed out, with an antiseptic solution. The patient falls to sleep, out of which he is awakened, before any urine has come in contact with his urethra by a sharp rigor, following which is a rapidly mounting fever and sweating with defervescence—a distinct and easily recognized urethral fever.

Several times have I seen this little drama enacted in practice; but never have I observed the urethral chill without instrumentation of the urethra.

4. Before practicing antiseptic washing of the entire urethra, tying in a catheter for drainage either through a perineal wound or in the urethra, did not secure even a perceptible diminution of the cases of urethral fever even when there was every reason to believe the drainage was perfect.

5. In no case has a urethral fever been observed by me to occur in a patient who was free of urethral inflammation in one of its forms; there was either sub-acute or chronic urethritis, or a stricture in some course of its development, or a mild form of traumatic irritation from frequent catheterism as in old prostatitis.

6. No case of urethral fever has occurred in twenty-one cases of supra-pubic cystotomy done by me, in every one of which bloody and purulent urine flowed over a fresh cut, and remained in contact with it for a long time. In two of these cases this form of fever had been a frequent accompaniment of the passage of an instrument before operation. In both of these cases the liability to urethral fever, in instrumentation, caused me to very carefully wash the urethra with the boro-salicylic acid solution before introducing an instrument to distend the bladder, and it happened also that the compressor in both was easily overcome by fluid pressure under the anæsthetic.

7. In the surgery of the kidney we have an excellent opportunity of observing instances where the urine, mingled with blood and pus, flows freely and for a length of time over freshly made wounds, and through fistulous tracks, without exciting

urethral fever; and this, too, in cases that do not necessitate the passage of an instrument into the urethra as a part of the operation procedure, as is the case in supra-pubic cystotomy, where urethral instrumentation is a necessary part of the operation. This removes a fruitful source of error. The failure to excite urethral fever in these cases, where all the other factors have full play, is most striking; yet it is, I believe, the common experiences of surgeons that this form of fever does not occur.

8. Not to mention those cases of intra-peritoneal rupture of the bladder, with escape of purulent and decomposed urine into the cavity, causing peritonitis, nor those of extra-peritoneal rupture, with burrowing of the fluid through considerable spaces, whence absorption must take place, we have those striking instances of urinary infiltration of the pre or supra-vesical space occurring after supra-pubic cystotomy, in none of which do we observe this accident.

The removal of prostatic myomata from the region of the vesical outlet is another achievement of the surgery of the middle urinary passages, which has given added proof of the fact that the most extensive lacerations, cuttings and burnings of the bladder do not cause urethral fever, though the other forms of constitutional disturbance are not uncommon.

The evidence there is as strong as presumptive evidence can be, that the ætiological field for urethral fever, as distinguished from the other forms of constitutional disturbance following mechanical attack on the uro-genital organs and passages, is limited to the urethra: justifying at least an hypothesis which can be overthrown only by good clinical evidence that this form of disturbance can be excited by such mechanical interference with the other parts of this system, without any urethral instrumentation or irritation as is well known to produce it. Such limitation ought to prove highly conducive to the more accurate and scientific study of the causative factor or factors of urethral fever. The separation of the different forms of those constitutional disturbances and their classification has already rendered absolute and unnecessary those theories which were constructed to account for the whole group, embracing, as it does, phenomena differing both in ætiology and in clinical manifestation.

I have already said that from the clinical point of view urethral fever appeared to be such a constitutional disturbance as would be produced by the introduction into the circulation of

a toxine or chemical substance, incapable of reproducing itself in the body, and that the morbid element did not appear to behave like one of the pathogenic micro-organisms. The phenomena seem always to be set going by the passage of an instrument, but in a certain number of cases it is observed that recurrences of the chill and fever take place without further instrumentation. This tendency to recur extends only over a short time, and does not offer a valid objection to the chemical view of the nature of the poison; for if the toxic agent is generated in the urethra and instrumentation gives opportunity for its absorption, it is quite in accord with our experience in other cases that this absorption would continue for some time, provided the poison continued also to be produced. The constant supply of the poison to a surface favorable to absorption—as in the case of a pocket denuded of its protective epithelium—might well account for such recurrences. So soon as granulations covered the denuded surface the absorption would cease; and it may be observed that the recurrences do not extend over a time longer than that required for a wound to be thus protected, while further instrumentation may cause an outbreak for a very much longer period.

To the theory that the poison is derived from the urine, there are several fatal objections. Aside from what has absolutely been said of the non-appearance of this form of chill and fever in the case of those operations on the middle and upper urinary passages which give excellent opportunity for such urinary absorption, it must be said that there are no known toxic principles in the urine which are capable of producing this form of constitutional disturbance. Of the seven toxic substances discovered by Bouchard and Charrin, not one, nor any combination of them, seem capable of producing the clinical manifestations of urethral fever. The hypothermisant (heat depressor) cannot produce a chill; and neither the organic nor the inorganic convulsivants are capable of causing a rigor. There is no fever-producer among them. However well the retention of these toxic principles in the body may account for the phenomena of uræmic auto-toxæmia, the study of them throws no light whatever on urethral fever. The theory of Mr. Reginald Harrison, that this fever was produced by the re-introduction into the circulation of some poison derived from the urine, must, therefore, be rejected; and by doing so we at the same time do away with the necessity for explaining away the non-appearance of this fever in those cases of sudden extravasa-

tion of urine—an objection which was clearly seen by its author.

It is a significant fact, in this connection, that urethral fever is never produced by injury or disease of the external genitalia other than the urethra. The most extensive lacerations of the penile, prostatic, didymal and scrotal tissues do not seem capable of eliciting this form of disturbance, though the shock in some of these cases is most profound.

A critical examination of the evidence at hand, in the light of more recent advances in the surgery of the urinary organs, and under the more recent classification which an analysis of the whole series of constitutional disturbances produced by disease and mechanical irritation of the tract enables us to make, it seems most probable that the toxic agent is produced by the urethral epithelium when in a state of irritation, either from disease or trauma, and that it is admitted into the circulation by a mechanical disturbance of the urethral mucosa which is capable of rendering the urethral lining inefficient.

If this hypothesis—advanced here only tentatively and not as amounting to a theory—is true, it ought to be capable of demonstration in the laboratory, even to the extent of isolating the toxine and establishing its unit of toxicity per kilo. Indeed I had hoped to be able to present some results of such experimental research at this meeting; but meagerness of time and paucity of opportunity have prevented and have compelled me to present the subject for discussion purely from the clinical side. Such a demonstration is necessary for the especial reason that there are discrepancies which the scientific mind can not blink, where reality must first be determined before their explanations can be sought out. The absence of urethral fever after instrumentation in the case of children and in women, must first be demonstrated clinically; and it may be noted that it is only, at the present time, an airy supposition often enough asserted but not backed up by evidence. Looking at this form of constitutional disturbance as constituting a distinct clinical type, I can say on my own part that I have never seen it in young children, and with possibly two exceptions, more in women, though I have seen some rough instrumentation of inflamed urethra in both classes of cases.

The great infrequency of chronic inflammation of the urethra in childhood, the absence of those diseases that, in the adult, bring about inflammatory stricture and the rudimentary state of the glands of Littre, morphologically the only characteristic

structures of the urethra as distinguishing it from the other parts of the uro-genital mucosa and from other mucous membranes, may explain the, at least, great infrequency of urethral fever in young children; but the shortness and ease of drainage of the female urethra does not in my mind explain the fact that this class of patients is almost, if not quite, immune. There may be physiological reasons of which we know nothing. On the whole this branch of the subject is obviously too nebulous to be brought into even the clinical study of this most striking disorder.

I hope shortly to be able to present some results of laboratory investigation which will throw a little light on the, at present, obscure parts of the subject.

The clinical evidence at hand points strongly to the following conclusions:

1. Urethral fever is clinically distinguishable from the other forms of constitutional disturbances following instrumentation of the uro-genital passages or accompanying the diseases of this system.

2. The causative agent is a toxine.

3. The pathogenic agent is generated in and by the urethral mucous membrane.

4. The nervous and circulatory changes constituting shock, while they may precipitate an outbreak, are incapable of producing the disease.

5. We may exclude the urine as an essentially necessary factor.

6. The anatomico-ætiological field for this disease is the urethra.

7. The most successful prophylaxis is that form of urethral asepsis and antisepsis which will clear the duct of its secretions, and remove or render innocuous the essential ætiological factor before any instrumentation whatever is attempted.

IRRIGATION OF THE DEEP URETHRA AND BLADDER WITHOUT CATHETER OR TUBE.

BY

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AMENT the recent items appearing in medical literature regarding the possibility of forcing fluids into the bladder by simple injection of the urethra, a few practical notes may be of value.

From my personal observation, I have been led to believe that there is the greatest possible variation in the resisting power of the deep urethral muscles and vesical sphincter. I have noticed that in some patients it is quite easy to force fluids into the deep urethra and bladder, while in others as much force as is compatible with the integrity of the urethral walls may be employed, without forcing injected fluids into these parts. Patients have themselves informed me that it was only with great care that they were able to inject the urethra without forcing the medicament into the bladder, while others never make such complaint.

I was at first inclined to attribute this difference to roughness of manipulation, but experiments have since proven to my entire satisfaction that the experience of these patients involves a point of great practical interest and importance. I have for many months been using irrigation with a short urethral nozzle in the treatment of urethritis, and have therefore been able to gain some valuable experience in this direction. I find that in many patients there is little difficulty—the irrigator being at about the level of the patient's head, on the average—in irrigating the prostatic urethra and bladder without either tube or catheter. This is accomplished with no discomfort to the patient, as a rule. I have utilized this practical point in the treatment of posterior urethritis to great advantage.

The first experiment which I made in this method of irrigation was upon myself, while endeavoring to disprove the prevalent notion of the impossibility of irrigating the bladder without a tube. This experiment I performed about five years ago. I found that after a few attempts I could distend the bladder with fluid quite readily. A point brought out by Dr. Bennett, in the July number of the *Journal of Cutaneous and Genito-*

Urinary Diseases, is of interest. He states that the compressor muscle is "a valve which allows a full stream or none at all." This is certainly not true as regards the ingoing stream in the method of irrigation under discussion, for the sphincter vesicae, cut-off muscle and membranous urethra do not completely relax under pressure. After the urethra has been distended to its utmost capacity, a certain amount of fluid passes into and beyond the deep urethra, and into the bladder—not in a full stream, but in direct proportion to the degree of consent grudgingly granted by the deep urethral muscles. As Dr. Bennett remarks, however, a voluntary attempt at urination while the fluid is passing into the deep urethra results in a full stream passing into the bladder, there being nothing but the action of the detrusor urinae to overcome—this amounts to nothing, as shown by the extreme degree of distension often resulting from the slow ingress of urine from the ureters in cases of obstruction to the urinary outflow. Regarding the facility of entrance of the water during irrigation, resulting from a voluntary attempt at urination, I desire to state that I called the attention of my classes ten years ago to the fact that voluntary attempts on the part of the patient to urinate during difficult catheterization were often of great assistance. Many of my students can recall instances occurring in my clinic in which attempts to expel the sound in certain cases of spasmodic stricture resulted in the sound gradually working its way into the bladder. I invariably try this experiment in cases of difficult catheterization. The effort of the will in such cases results in an inhibition of the cut-off muscle, with consequent relaxation and removal of the muscular impediment which guards the way to the bladder. This point is often of great practical value. Oftentimes the irritation of the deep urethra is so marked that the resulting reflex spasm on passing the catheter is too pronounced to be overcome in this simple manner, but in by far the majority of cases the procedure is of great assistance. As is well known, many cases of vesical irritability and so-called cystitis are really due to prostatic inflammation or posterior urethritis. Irrigation of the bladder is in these cases somewhat disappointing, if carried out in the usual manner with the catheter. The passage of the catheter is attended with some difficulty and a degree of pain and resulting irritation, varying in proportion to the amount of prostatic trouble. As a matter of fact, irrigation in such cases is misapplied in so far as it is directed to allaying

secondary vesical conditions at the expense of an aggravation of the primary trouble in the prostate. By the method of irrigation which I am at present practicing, however, most excellent results are obtained on the average. Cases which will not tolerate the ordinary method of irrigation are greatly benefited by the one in question. The advantages of this treatment in posterior urethritis are obvious. One of the advantages in prostatic troubles is the facility with which hot water may be applied directly to the prostatic sinus.

By carefully adjusting pressure by means of the fingers about the nozzle while the latter is *in situ* at the meatus, the entire urethra may be kept fully distended by the solution, while the excess of water is allowed to steadily escape around the nozzle. In the treatment of urethritis this method of irrigation is far superior to that usually adopted. In passing a tube or catheter into the urethra, more or less abrasion with removal of the already degenerated epithelium from the surface of the mucous membrane occurs. We have also superadded the element of friction as the water returns between the tube and the urethral walls. This further enhances removal of epithelium. Another point is that the urethra is never entirely flushed by this method. The canal collapses in the intervals of urination and is thrown in longitudinal folds. These folds are forced down about the catheter by reflex spasm,—urethral clonus—and only the edges of the folds are washed by the current of fluid. In order to wash the membrane thoroughly, the urethra must be ballooned by obstruction to the escape of the fluid at the meatus. By regulating the height of the irrigator and thereby regulating the degree of pressure, with a careful adjustment of the pressure obstruction to the egress of the fluid, the anterior urethra may be flushed without a drop of fluid passing the triangular ligament. The objection may be urged that this ballooning of the urethra is apt to produce strain and inflammatory reaction. So it will, if improperly used, but the pressure is under complete control, which cannot be said of the irrigating tube or catheter, the conditions for the introduction of which cannot be regulated. A proper selection of cases is of course necessary. I do not think that irrigation by any method whatsoever, should be practiced in acute virulent urethritis *in which the principal indication is absolute and uncompromising rest.*

A very promising feature of the new method of vesical irrigation, is the fact that the patient can easily irrigate his own

bladder in quite a proportion of cases—something that he cannot readily do *via* the catheter. The average patient does himself more harm by the catheter, than can possibly be compensated for by the benefits to be derived from vesical irrigation. It is hardly necessary to call attention to the advantage of obviating the dangers of a dirty catheter.

In all cases it is well to instruct the patient to wash the anterior urethra thoroughly before allowing the fluid to enter the deeper parts and bladder. The urethra is well populated by germs of various kinds which it is well to keep out of the bladder. In case there be the slightest degree of infectiousness of any inflammation which may exist in the anterior urethra, the importance of this precautionary flushing is very obvious.

The non-applicability of this method in cases where serious organic obstruction exists in the urethra or at the neck of the bladder, at once suggests itself. The method, however, is designed to meet the indications existing in a large class of cases in which irrigation of the bladder and prostatic sinus is demanded, yet catheterism is to be avoided if possible. Whenever we can accomplish the purpose of vesical or urethral irrigation without instrumentation, it is our duty to do it. Obviously, the method which has been described is not apt to be of service when urethral stricture exists, unless the latter be of large calibre.

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THE SIGNIFICANCE OF PUS IN THE URINE OF MAN.¹

BY

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BEFORE entering the question how to detect the source of pus-corpuscles found in urine, I wish to briefly explain what pus is. Although this topic is not of much practical importance, we must seek an answer to it, for it is impossible to intelligently localize an inflammatory process in the genito-urinary tract without a knowledge as to the nature of pus, or, speaking to the point, of pus-corpuscles.

A pus-corpuscle is a sharply defined lump of protoplasm, a "cell" in the old terminology, varying in size in different individuals, averaging the size of colorless blood-corpuscles, either

¹ Address delivered before the Genito-Urinary Section of the New York Academy of Medicine, May 12, 1892.

homogeneous or coarsely granular, without a visible nucleus, or finely granular, and, in the latter instance, exhibiting from one to four nuclei. The variations in the looks of a pus-corpuscle are due to constitutional differences. The protoplasm may, in an organism of a brilliant constitution, be altogether made up of living matter, and then appears structureless, homogeneous, of a high gloss, unable to perform amoeboid movements or locomotion in a fresh condition. Or, the pus-corpuscle may be coarsely granular, the nucleus being either absent or rendered invisible by the granules, in organisms of a middling constitution. Such pus-corpuscles change shape but slightly, if examined shortly after being voided. The finer the granulation, the more conspicuous and the more numerous the nuclei, the worse is the constitution of the individual from whom the pus-corpuscle has originated. These differences are easily discernible with a power of 500 diameters of the microscope. Obviously, the granules are nothing but the points of intersection of a reticulum of living matter, pervading the lump of protoplasm, as directly proven by S. Stricker, of Vienna, Austria, in 1890, by means of photo-micrography under the electric microscope. The finer the granules, the points of intersection, the more liquid is held in the meshes of the reticulum, and the less living matter is present, the more active will be the amoeboid changes and locomotions of the pus-corpuscle in fresh, warm urine. This, as such, is the best and simplest preserving fluid for protoplasmic formations generally. Mucus-corpuscles, the normal products of the epithelia covering the mucous membranes, are, without exception, finely granular, irregularly contoured and non-nucleated bodies. They are present in small numbers in every normal urine. Their sizes vary greatly according to the locality where they have originated.

As to the origin of pus, not long since three different views were held by pathologists. First, the cellular view of Virchow, which considered the pus-corpuscles as products of proliferation of the tissue-cells; second, the emigration theory of Cohnheim, which suggested that pus-corpuscles are nothing but emigrated colorless blood-corpuscles (leukocytes); and third, my own assertion that pus-corpuscles are the products not only of the "cells" of the tissues, but also their basis and cement substances, after the return of the latter to the state of protoplasm. To-day Cohnheim's theory, which in this country found the most zealous advocate in Wm. H. Welch, of the Johns Hopkins University, in Baltimore, must be considered as ex-

ploded. Virchow last year announced that the leukocytes have "fallen back into their nothing," literally translated from the German, after the active participation of the tissue-cells was proven by the remarkable changes of the forms of the nuclei of "cells"—the so-called mitosis—in the process of inflammation. My doctrine found support in Europe by my former teacher, S. Stricker, of Vienna, who, since 1880, has become a convert to the novel biological views of his pupil. In this country, T. Mitchell Prudden, of New York, came nearest to the truth when saying that pus is "dead tissue." He is followed by Professor Black, of Chicago. Nothing, however, is "dead" in the process of inflammation, since every pus-corpuscle is a living organism, changing shape and place in a fresh specimen. Dead means "necrotic," and no clinician will admit that suppuration and necrosis are identical processes. If Prudden would say: disintegrated tissue, or tissue reduced to its embryonal condition since 1873, now supported by S. Stricker.

Let us lay aside scientific controversies and try to answer the question: Which is the source of pus? The answer is: Any living tissue of the living organism. In the mucous membranes and glandular formations of the genito-urinary tract the source must, therefore, be epithelium and connective tissue. Every inflammation will, of necessity, attack the covering epithelium, cause the swelling of the epithelia, the increase of their living matter, a process long since known by the term "proliferation," and if the newly formed lumps of living matter become detached from the reticulum of the mother body, after bursting of the latter, they will appear in the urine as isolated lumps, and now bear the name of "pus-corpuscles." This new formation can plainly be traced, step by step, in any so-called cold or catarrh of the nasal or laryngeal mucosa, the same as in the epithelia of the urethra in gonorrhœa, in the epithelia of the middle layers of the bladder, in catarrhal cystitis, etc. We find in the urine enlarged detached epithelia of the different organs, crowded with coarse granules—the increased living matter—up to the size of pus-corpuscles, sometimes as many as six in number within a single epithelium. After the escape of the pus-corpuscles the epithelium shows vacuoles, the empty spaces previously occupied by the pus-corpuscles. This process of formation of pus from epithelium was known to the old pathologists by the term "endogenous new-formation," which term I would consider appropriate even in our day,

provided that we abstain from calling the epithelium a "mother-cell."

In every superficial inflammatory process a number of epithelia will directly be transformed into pus-corpuscles, whereas another number is detached from its bed, and appears in the liquid discharge, in our instance the urine, unchanged or changed, as just described. Such processes are long since known as *catarrhal inflammation*, representing the mildest degree of an inflammatory disturbance. Although the word has no proper sense, and was adopted by the humoral, but discarded by the cellular pathology, in lack of a better nomenclature I have accepted it. With me "catarrhal inflammation" means an inflammation mainly confined to the covering epithelia, which are present either in a single layer only, as in the uriniferous tubules, or in stratified layers, as in the rest of the mucous linings of the genito-urinary tract. Obviously, the inflammation must have started in the subjacent connective tissue, the carrier of the blood-vessels; but the morbid process of the connective tissue does not yield visible products in the urine, provided the inflammation be catarrhal or superficial.

These remarks will enable us to understand how we can tell the source of the pus present in urine. A number of epithelia being invariably washed away in inflammation from their beds, we at once are in the position to localize the inflammation by watching the cast of epithelia in the urine. Since the epithelia have peculiarities in size and shape in different portions of the genito-urinary tract, the knowledge of these peculiarities is all that is required for telling the seat of the inflammation with, dare I say, absolute certainty. A drop of the sediment of the urine—formed after at least six hours' quiet standing of the latter—with a power of the microscope not exceeding 500 diameters, is sufficient for such a diagnosis.

In superficial or catarrhal inflammation the connective tissue, subjacent to the epithelia, although likewise inflamed or cedematous, with its blood-vessels dilated and engorged with blood-corpuscles, causing the inflammatory redness and swelling, will not yield visible products. A serous exudate cannot, obviously, be recognized in urine. The state of affairs is quite different, however, when the deeper tissue-layers, i. e., the connective tissue, is markedly involved by the inflammatory process. Not only will the connective tissue actively participate in the production of pus-corpuscles, after the shedding of the covering epithelium; not only will a certain number of blood-

vessels burst, and produce the image of "hæmorrhagic inflammation," but a certain amount of connective tissue-shreds will be cast off in a more or less changed condition, and appear in the urine under the microscope.

In previous years the microscopists did not know anything about shreds of connective tissue, torn off from the genito-urinary organs, except in ulcerating villous cancer of the bladder. For over seventeen years I teach in my laboratory that shreds of connective tissue are of a frequent occurrence in urine, always appearing whenever an intense inflammation or destruction has invaded the deeper portions of the mucosa. We, therefore, will find such threads (1) in suppuration; (2) in ulceration; (3) in ulceration or mechanical destruction of tumors, especially of the bladder, both benign and malignant; (4) in cirrhosis and atrophy of the kidneys, where portions of newly-formed connective tissue are detached; and (5) in any hæmorrhage. In the latter instance, shreds located between the burst blood-vessel and the covering epithelium must, of necessity, be dragged away by the current of the blood, and appear in the urine, together with some detached epithelia, which latter, in many instances, enable us to directly trace the seat of the hæmorrhage; (6) Mechanical injuries, awkward catheterization, for instance, will cause hæmorrhage and casting off of connective tissue-shreds from the urethra. In the urine of girls, masturbation, the mechanical injury done to the vulva and the introitus with the finger, brings shreds of connective tissue into the urine, corresponding to the shallow excoriations of the mucosa.

With these preliminary remarks, I now proceed to the analysis of the source of pus in urine, after more than seventeen years' almost daily practice, and after having examined with the microscope over two thousand samples of urine. Clinical and post-mortem examinations have frequently corroborated my statements made in the vast majority of cases, without the least knowledge of the clinical features of the case.

Inflammation of the urethra, catarrhal as well as gonorrhoeic, furnishes symptoms sufficiently clear both to the patient and the physician, and there is no call for a microscopical examination of the urine. Still, I have repeatedly seen the large 'cast-off' columnar epithelia of the posterior urethra, together with pus-corpuscles and slender shreds of connective tissue, which features enabled me to draw the attention of the physician to the presence of an ulcer or a stricture

in the posterior urethra. This diagnosis was corroborated in several instances.

Inflammation or less than that, irritation of the ejaculatory ducts, is to be diagnosed whenever we see the slender columnar ciliated epithelia of these ducts in company with pus or mucus-corpuscles. The trouble is not quite rare in chaste youths with intense, though unsatisfied sexual desires. I believe I was the first to point out the ciliated nature of these epithelia, the only ciliated ones in the male genito-urinary tract.

Inflammation of the prostate gland is of a frequent occurrence both with acute and chronic gonorrhœa, especially the latter, the so-called gleet. The presence of prostatic epithelia, exactly double the size of pus-corpuscles and voided through the prostatic ducts, where they are bluntly columnar, pear-shaped, and pus-corpuscles entitles us to establish the diagnosis "prostatitis." A large number of pus-corpuscles and prostatic epithelia, together with shreds of connective tissue allow the conclusion that there is an intense acute prostatitis with, eventually, supuration of the prostate-gland. Years ago Dr. Montrose R. Richard, of this city, sent urine for microscopical examination without a word about the clinical features. My report was: intense acute prostatitis, possibly abscess of the prostate. Next day Dr. George W. Jacoby, who worked in my laboratory, was told about this unusual diagnosis. He happened to know all about the case and at once said that the consulting surgeon, the late Dr. H. B. Sands, made the clinical diagnosis: intense acute prostatitis, possibly abscess of the prostate, as afterward confirmed by Dr. Richard. In this case the kidneys were but slightly affected. The abscess burst through the rectum and the patient got entirely well. In chronic prostatitis, which is identical with hyperplasia of the prostate, aside from pus-corpuscles and prostatic epithelia, as a rule, a few slender shreds of connective tissue will be found, sometimes also concentrically striated prostatic concretions. How often have I drawn the attention of the physician to the presence of an enlarged prostate of which neither he nor the patient had the remotest idea. Digital examination per rectum verified my diagnosis. If I know nothing about the case, my routine-diagnosis is: "prostatitis," should the patient be under forty years of age and "enlarged, hyperplastic prostate," of over forty years of age, since we know that the prostate scarcely ever becomes hyperplastic below the age of forty. Of course, I do not deny that an elderly man

may be foolish enough to acquire an acute gonorrhœa with subsequent acute prostatitis; but this is exceptional. I am convinced, however, that prostatitis acquired in youth through gonorrhœic infection is the most common cause of enlarged prostate in advanced age, with all the horrible sufferings arising therefrom.

Inflammation of the spermatic vesicles, spermato-cystitis. I have diagnosed with the microscope thus far only in three cases. Some twelve years ago Dr. L. Weber of this city sent urine of a patient, who had travelled all through Europe, never obtaining a diagnosis even from the best surgeons on account of the obscurity of the symptoms. I found pus-corpuscles with long tails, and concluded that the heads of the spermatozooids had grown up to the size of pus-corpuscles, since I was able to trace transitional sizes of the heads of spermatozooids with their tails attached. I demonstrated the specimen at that time in the New York Pathological Society. Dr. Weber corroborated my diagnosis clinically. In almost every pathological museum we find a specimen of an enormously enlarged spermatic vesicle containing pus, which proves that the disease is not very rare. I have placed a specimen from the third case I have observed under the microscope, and everyone of the gentlemen will see, to how large a bulk the heads of the spermatozooids may grow in spermato-cystitis, not necessarily terminating in suppuration.

I now enter the practically highly important chapter of the *inflammation of the bladder, cystitis*. The bladder, as is well known, is lined at its inner surface, the mucosa, with a stratified epithelium, consisting of three layers. The innermost layer is made up of flat nucleated epithelia, of which it is proven that only the nuclei are possessed of properties of life, the same as in the flat epithelia of the oral cavity, the œsophagus, etc., the rest of the protoplasm having undergone a partial change to a horny substance, a change, so conspicuous in the epidermal scales. The middle layer, the heaviest, is built up of cuboidal epithelia occasionally slightly caudate, especially in the deepest portions of this layer. These epithelia are endowed with properties of life all through, even in the connecting threads that traverse the intervening cement substance, the so-called prickles or thorns. The deepest layer is composed of but one set of columnar epithelia, likewise nucleated. The flat epithelia of the innermost layer are thrown off during life in small numbers, and their presence alone, without

pus-corpuscles and epithelia of the middle layers has no significance. As soon, however, as pus-corpuscles are found in the sediment of the urine, together with epithelia of the middle layers, which latter, as a rule, appear coarsely granular, the nucleus often hidden, the diagnosis catarrhal cystitis can be established, the intensity of which is shown by the number of pus-corpuscles found. Again, should epithelia of the flat and cuboidal varieties be present, the diagnosis is acute catarrhal cystitis; if, on the contrary, flat epithelia be scarce, or completely absent, and cuboidal epithelia be found in prevalence or exclusively, the diagnosis will be chronic catarrhal cystitis. In this condition there is a deficient development of flat epithelia. Occasionally we see epithelia from the middle layers of the bladder holding needles of a rust-brown color, hæmatoidin, or grayish brown clusters of pigment, both the outcome of previous hæmorrhages. Repeated hæmorrhages furnish mucosa of the bladder, especially its epithelia, with a mottled slate color of varying intensity. The deepest epithelia appear in the urine but exceptionally, and only in very intense cystitis or ulceration of the mucosa. The so-called neck of the bladder, which actually does not exist, but means the portions surrounded by the prostate gland, is covered by flat epithelia of a noticeably larger size than the rest of the vesical mucosa and the epithelia of the middle layers, in this situation, are likewise larger than in the body of the bladder, and provided with off-shoots and jagged contours. The temptation to mistake the flat epithelia from the prostatic portion of the bladder for vaginal epithelia, is great; but since they are usually present in small numbers and lack colonies of micrococci, so common upon vaginal epithelia, the mistake eventually, but not invariably, can be avoided. Under such trying circumstances I report: if this be a man, etc., or, if this be a woman, etc. Once, I confess, I made a mistake in telling the sex, the diagnosis of which, in average cases, offers no difficulties. As mentioned before, the cuboidal epithelia of the bladder are not infrequently found in endogenous new formation of pus-corpuscles, and show in their interior either such corpuscles in varying stages of development, or empty vacuoles, sometimes to such an extent, that the epithelium appears like a sieve, only a frame of it being left. This feature is especially pronounced when a slow but continuous pressure from behind is exerted upon the mucosa of the bladder. Again, such a pressure is most commonly due to an enlarged prostate gland and, should we find the characteristic

features of prostatitis, combined with catarrhal inflammation of the mucosa at the prostatic region of the bladder, the localization of the disease is rendered easy. Should the sediment of the urine display all features of catarrhal cystitis together with a number of red blood-corpuscles and numerous crystals of uric acid, the inference will be that a uric acid concretion is present in the bladder. My inference was clinically corroborated once by Dr. Willy Meyer and once by Dr. Edward L. Keyes, omitting the cases of which I did not hear afterward. Chronic catarrhal cystitis is, however, easily diagnosed by watching the sediment with the naked eye, whenever the urine is voided in an alkaline condition or soon after having been voided becomes alkaline. The pus-corpuscles are then transformed into a ropy tenaceous jelly, difficult to be transferred upon the slide. The microscopist has, even in such cases, the important task to tell, how much the kidneys are affected; for, there is no doubt that they are affected more or less in every case of chronic catarrhal cystitis.

Ulcers of the mucosa of the bladder are by no means rare, especially when the catheter is applied frequently. Aside from the usual features of chronic catarrhal cystitis we then find shreds of connective tissue and colonies of cocci (staphylococci), present even in an acid urine. The diagnosis is readily established and the more important, since it will enable the surgeon to treat the ulcers, particularly at the prostatic portion of the bladder, where their presence causes untold agonies to the patient.

Tumors of the bladder are an interesting topic to the microscopist, although to-day another scope, i. e., the cystoscope greatly facilitates their recognition to the skilled eye of the surgeon. Among the benign tumors of the bladder the papilloma is the most common; myoma, on the contrary, very rare. Of the malignant tumors I wish to enumerate sarcoma (myeloma) and carcinoma. All these tumors become subject, of diagnosis with the microscope, as a matter of course, only when portions of their structure are cast off, appearing in the sediment of the urine together with a varying amount of red blood-corpuscles. Papilloma is characterized by the presence of numerous and large shreds of fibrous connective tissue, often holding capillary blood-corpuscles, and sometimes coiled up to peculiar bun and knob like formations, with or without features of an accompanying catarrhal cystitis. The late Dr. Hutchinson, of Utica, N. Y., years ago brought to my laboratory such knobbed

shreds, in which even loops of capillary blood-vessels were seen, engorged with blood corpuscles. He wanted to show me a rarity, he said, a case, in which the tufts of the kidneys were cast off. I had a hard time not to burst out in a laughter. It was a typical case of a papilloma of the bladder and the patient died several years afterwards from anemia caused by the numerous exhausting hemorrhages. It is easy to explain that the slender finger-like prolongations are mechanically torn off in the movements of the wall of the bladder at micturition, and in the whirl-pool of the streaming urine are coiled to tufts. Myoma I have seen but once, through the kindness of Dr. L. Weber. His clinical diagnosis of a myoma was confirmed by the microscopical examination of the large shred voided with the urine. Sarcoma, or, as I would prefer to call it, myeloma, especially lympho-myeloma, the small round celled sarcoma of Virchow, becomes recognizable by the presence of compact or coarsely granular corpuscles, in size between a red blood and a pus-corpuscle provided they are seen in large numbers, together with blood-corpuscles and shreds of connective tissue. My first diagnosis of a lympho-myeloma of the bladder, of a lady in Brooklyn, was, years ago verified by a prominent gynecologist of this city. Quite recently the urine of an old lady was examined in my laboratory, where the diagnosis was lympho-myeloma of the uterus, perforating the wall of the bladder. The post-mortem examination in this case is, however, not yet performed. Of the varieties of carcinoma we can tell villous cancer, medullary cancer and epithelioma or dermoid cancer. The shreds voided will show the typical nests of epithelia and a characteristic configuration of the connective tissue. In one case I had diagnosed epithelioma at the prostatic portion of the bladder, and this diagnosis was confirmed by autopsy. I would never rely upon single epithelia, for we know that the covering epithelia of the tumors may assume widely different sizes and shapes; but would only study the shreds and the groups of epithelia held therein.

As regards *diseases of the ureters*, I do not claim anything in the line of microscopical diagnosis. The stratified epithelia of these tubes are identical in size and shape with those of the bladder, and in their deeper layers with those of the prostate-gland. Whenever I see a few epithelia of the size of the prostate, I frankly admit my inability to localize the disease. A few epithelia—one or two in a drop of the sediment—are not sufficient to me to establish any diagnosis. Epithelia of a cer-

tain type must be present in larger numbers, together with a number of pus-corpuscles to enable me to say something positively. Besides a diagnosis of the microscopist is of little or no value, unless confirmed by clinical or post-mortem examination.

Inflammation of the pelvis of the kidneys, pyelitis and hemorrhages from the pelvis are test-objects for the microscopist, especially as they are by no means rare. The covering epithelia of the mucosa of the pelvis and calices are a trifle smaller than those of the middle layers of the bladder, distinctly nucleated and provided with off-shoots, the so-called "caudate cells" of older writers. Such off-shoots are far more pronounced in the pelvic than in the bladder epithelia. The deeper layers are of an ovoid shape, always larger than those of the prostate gland. In *catarrhal pyelitis*, so frequently accompanying catarrhal nephritis, we meet with detached caudate pelvic epithelia and pus-corpuscles. In *suppurative pyelitis* the number of the pus-corpuscles is large, that of pelvic epithelia comparatively small, and an additional feature are shreds of fibrous connective tissue. Several years ago Dr. Carl Beck sent a sample of urine, my diagnosis being suppurative pyelitis. The clinical symptoms permitted to localize the disease on the right side, where Dr. Beck made the incision, cut open the enormously dilated pelvis, washed out the pus and united all the wounds made. If *concretions of uric acid or oxalate of lime* are found with the characteristic features of pyelitis, the inference is that the respective concretions are instrumental in producing the pyelitis. In such cases repeated *hemorrhages* invariably take place from the pelvic mucosa, and again we are enabled to tell that such hemorrhages have occurred previously, if we find rust-brown crystals of hæmatoidin in the pelvic epithelia and in the pus-corpuscles therefrom. In such cases the diagnosis is often rendered difficult by the accompanying catarrhal cystitis and nephritis.

The *inflammatory diseases of the kidneys* are unfortunately bunched together under the name "Bright's disease," or, for an improvement, "Bright's diseases." There is hardly a more distressing and senseless designation in medicine than this. Diseases distinctly characterized, primary as well as secondary, are put together, never to be cleared up under such a heading. Many pathologists have tried to bring the different forms of nephritis into a system, thus far with but little success. The system of Francis Delafield is certainly far from being comprehensible. It seems to be an easy task, however, to render

the forms of nephritis intelligible, if we separate the primary from the secondary changes in the tissues of the kidneys. I adhere to the old nomenclature, since I consider the uriniferous tubules as terminations of the mucosa of the genito-urinary tract, the epithelia of which are continuous from the mouth of the urethra up to the linings of the capsules of the tufts and the tufts themselves. Briefly, my division is as follows:

1. *Catarrhal nephritis*, identical with the interstitial and desquamative form of other authors. No inflammation of a surface lined with epithelia can ever be purely interstitial, i. e., altogether confined to the connective or interstitial tissue underlying the epithelia. "Catarrhal" is, I admit, no proper expression either, but being introduced into pathology some fifty years ago, I rather would prefer it to "interstitial." This form may be *acute* or *chronic*, and, in the latter instance, marked by repeated so-called sub-acute attacks. The diagnosis of this very common disease is readily made from the microscopical examination of the urine sediment. It is the only means to recognize the disease *in vivo*. The characteristic elements found are the detached epithelia of the uriniferous tubules, usually rounded off by taking in liquid from the urine, either cuboidal from the convoluted tubules or columnar from the straight collecting tubules; whereas the flat epithelia of the narrow or loop tubules assume, after being rounded, the size of those from the convoluted tubules. The cuboidal epithelia are exactly one-third larger in diameter than pus-corpuscles. These latter always furnish the standard for comparison with other formations. The number of pus-corpuscles and kidney epithelia will determine the intensity of the nephritis. The columnar epithelia of the straight collecting tubules are seen much rarer than the cuboidal ones. Catarrhal nephritis, unless of a considerable intensity, does not endanger the life immediately, but is dangerous by becoming chronic and gradually causing the shrinkage of the kidney, so-called "cirrhosis," the small, contracted or hob-nail kidney. In neither of these forms is there ever found a considerable amount of albumin, often but a trace, or it may be entirely absent. I show you a contracted kidney of a broker, of Dr. H. B. Millard's practice, considerably reduced in size and exhibiting a surface beset with small granulations of a pretty uniform size. In this case the diagnosis was made during life. Death occurred suddenly from hæmorrhage into the brain. Cirrhosis of the kidneys furnishes large amounts of a watery urine of a very low specific gravity, under

1010, and destitute of salts. If larger quantities of phosphates are met with under the microscope, with all features of cirrhosis of the kidney, to which belong also delicate shreds of fibrous connective tissue and blue lumps of indican, the inference will be that only one kidney has shriveled considerably, whereas the other still performs its duties to some extent. Unilateral cirrhosis of the kidneys is by no means rare.

2. *Croupous nephritis*, identical with the parenchymatous form of Virchow. Again two expressions lacking proper sense. "Parenchymatous," means confined to the epithelia, something which in reality never occurs; "croupous" is introduced by Henle, who mistook the casts for coagulated fibres, although we must admit that even to-day we do not know what chemical substance the casts are made of. This form of nephritis is far more dangerous than the catarrhal. It is characterized by a large amount of albumin, the presence of tube-casts aside from a number of kidney epithelia and pus-corpuscles. This form is also either *acute or chronic* and the diagnosis is readily established by the nature of the casts present. Hyaline, epithelial and blood-cast mean acute croupous nephritis, the last-named showing also a complication with hæmorrhage. Granular, fatty and waxy casts, on the contrary, signifying chronic croupous nephritis; the fatty casts being indicative of a fatty, the waxy casts of a waxy (amylaceous, lardaceous) degeneration of the kidneys. Again each of the six varieties of tube-casts may appear in three sizes, according to their origin from convoluted, narrow or collecting tubules. Narrow casts mean the evident degree of croupous nephritis; casts from the convoluted tubules indicate an affection mainly in the cortex of the kidney, more especially of the outermost layer of the cortex, since casts of the convoluted tubules of the first order will never appear in the urine. If in addition to the two named forms casts from the straight collecting tubules are also present, this means an inflammation of the whole organ and is of the greatest danger. A sad prognosis which I gave many years ago to Dr. J. Lewis Smith, the patient being a child of his who had suffered from a mild attack of diphtheria, unfortunately proved correct after a few days, much against the expectations of the clinician. In croupous nephritis of pregnancy, where, as a rule, only the right kidney is affected, the size of the casts will be decisive for induction of premature labor, again an assertion that I have verified in a number of cases. The chronic form of croupous nephritis, frequently leads to *atrophy of the kidneys*. Whereas

in cirrhosis the total bulk of the kidney gradually diminishes, and the surface is uniformly granulated, in atrophy the size of the kidney is not much reduced, but the surface shows large and deep retraction and irregular hills between the valleys, in which latter the structure of the cortex is completely destroyed. Nor is atrophy always the outcome of chronic croupous nephritis; often we meet with fatty, or waxy degeneration or a combination of both, the so-called "large white kidney" of English authors. In such a termination of chronic croupous nephritis the kidney is enlarged, sometimes to a considerable degree. Fatty degeneration of the kidneys appears in an acute form only after poisoning with phosphorus, arsenic, etc., otherwise it is secondary to chronic croupous nephritis. In atrophy the specific gravity of the urine is likewise low, 1010 or under, salts are entirely absent. The difference between the urines from cirrhoted and atrophied kidneys is, that in the former we find no casts and but little albumin, in the latter casts of the chronic form and an abundance of albumin. Pus-corpuscles, kidney-epithelia and threads of connecting tissue are common to both forms, the latter being far more numerous in atrophy than in cirrhosis. The clinical symptoms are more threatening in atrophy than in cirrhosis of the kidneys; for, in the latter instance, especially if fatty degeneration is present, any new attack of nephritis, grafted upon the chronic form, may end the life of a patient in a short space of time. I demonstrate to the section an atrophied kidney from a patient of Dr. Alfred Meyer, in which case the diagnosis was thoroughly established during life. The retractions of the surface are extremely pronounced.

3. *Suppurative nephritis*, synonymous with abscess of the kidney, pyonephrosis, surgical kidney. The genito-urinary surgeons have produced a good many specimens of this type before the time of antiseptis and asepsis. The kidney which I present for inspection contains five large abscesses and several small ones. This remarkable specimen came from a young man of twenty, as the result of a gonorrhoeic infection. I made the diagnosis and urged the late Dr. H. B. Sands to make nephrotomy; but the parents refused my proposition, and the post-mortem examination verified my diagnosis. I recall a case of a German, where I positively maintained from microscopical examination that one kidney was in the condition of suppuration. Nephrectomy was performed by Dr. Fred. Lange and the patient's health re-established. The diagnosis is made by the

following features: A large number of pus-corpuscles means intense inflammation; a large number of kidney epithelia means intense inflammation of the kidneys; a large number of shreds of connective tissues means destruction of the kidneys, i. e., suppuration.

Hæmorrhage from the kidneys can be told, if kidney-epithelia are found among the red blood-corpuscles, invariably accompanied by small shreds of connective tissue. Needles or prisms of hæmatoidin within the kidney-epithelia indicate previous attacks of hæmorrhage, more frequently disseminated from the capillaries, so-called capillary apoplexy, than profuse from a larger vessel. A hæmorrhagic infarctus of the kidney is identical in its microscopical features with an intense acute croupous nephritis; its termination is likewise atrophy of the kidney.

Of the *tumors of the kidney*, I claim to be able to diagnose lympho-myeloma, the small, round-celled sarcoma of Virchow, provided that particles of the tumor are shed off and carried into the urine. Altogether, I have made this diagnosis five times. That this can be done, I will prove by the demonstration of a halved right kidney with the following history: Toward the end of 1889 urine was sent to me from a patient of St. Mark's Hospital. I said that a myeloma of one kidney was present. All clinical features pointed toward a disease of the right kidney, and so great was the faith of the attending surgeon that he made an incision for manual exploration of the kidney. No tumor was found and the wound closed. The patient died a few days afterward. The right kidney was removed at the post-mortem examination and sent to my laboratory without a word of reproach. The kidney was a little smaller than normal, in the state of beginning cirrhosis, with a granulated surface. I confess I was disgusted with myself. I placed the organ in a solution of chromic acid, being determined to announce my mistake before the profession. Two months afterward I took the (meanwhile hardened) kidney for microscopical examination, and halved it with the razor. To my great surprise, a tumor was found in the depth of the kidney the size of half a walnut, starting from two or three pyramids and bulging into the cavity of the pelvis. Microscopical examination of this tumor, made by myself and several experts, proved it to be a lympho-myeloma beyond the slightest doubt.

Should, in the future, such a diagnosis be established with certainty, catheterization of the ureters will directly demon-

strate which of the kidneys is affected. The urine pouring from one ureter, with myeloma-corpuscles in it, will furnish proof of the seat of the tumor, and nephrectomy may, under these circumstances, save the life of the patient.

Correspondence.

DERMATOLOGY AND SYPHILOGRAPHY IN FRANCE.

Treatment of Pruriginous Dermatoses by Hot Douches.—In the numbers of this Journal for January and April will be found already mentioned the original observations of Dr. Jacquet upon the treatment of lichen planus by hot douches. Our excellent friend continues to pursue his interesting experimental studies and his communications to the Society. On the 21st of April he presented two additional patients. The first was a neuropathic woman who had been subjected to all sorts of annoyances and sorrows, and had previously suffered from a pruritus without any eruption on the surface. She then developed a lichen planus, and presented cries of itching of an intense degree, which recurred especially at night after disrobing. After about ten days of daily hot douches she began to experience benefit and to have less violent attacks, but some days later her condition again became aggravated, and every day, about five o'clock in the afternoon, she had attacks of pruritus. Dr. Jacquet then gave her a second douche, at four o'clock, a little before the time of attack, and since then the severe itching has disappeared, and little by little the patient has become convalescent. The second patient was quite as demonstrative, and had been affected for about sixteen months. The hot douches relieved her rapidly, and she then ceased their employment for three weeks. A violent recurrence then took place, and she again took up the douches, with the result that a cure was brought about after twenty days or so.

In the discussion which succeeded the communication of Dr. Jacquet, Dr. Quinquand remarked that there are cases which absolutely resist treatment by hot hydrotherapy, and he has been successful in sending such patients into high altitudes, where amelioration has rapidly been secured, and finally complete cure.

For my own part, I believe that in the majority of cases of lichen planus we must distinguish two elements which very frequently are intimately united, but which may also be distinct: (1) a state nearly always marked by nervous excitability and by cutaneous neuropathy; (2) the eruption itself. That which proves this is that these two elements can exist separately. The eruption of lichen planus may be but slightly pruriginous, and in certain benign but chronic cases I have seen it, so to speak, indolent. On the other hand, the neuropathic condition of the skin may exist either with an eruption of lichen planus or with a simple eruption of lichenification of the skin, produced under the influence of scratching. Here, in fact, is an illustrative case that I have just observed. I was called last year to a patient of about forty-eight years, stout and neuropathic to the last degree, who

had been affected for some months with a typical and almost generalized eruption of lichen planus, accompanied by incessant itching. Under the influence of a quite energetic treatment, which consisted especially in the administration of arsenic internally, in large doses, and in external applications of mercurial preparations, the lichen planus disappeared at the end of a month and a half. The itching became calmed, but the neuropathic general condition persisted. After two or three months of apparent cure the patient again began to have pruritus of a most severe nature, without the appearance of any eruption. Little by little, however, the skin became altered, but the usual medical attendant, no longer recognizing the eruption as one of lichen planus, and seeing that arsenic by the mouth and mercury upon the surface produced no longer any good effect, again consulted me. I found no longer any vestige of lichen planus, but, on the contrary, the skin was thickened, hardened, furrowed in right angles by the exaggeration of the natural folds. In a word, the skin had undergone a marked transformation by reason of the incessant rubbing to which it had been subjected, and had assumed the condition to which I have given the name of lichenification. We thus see, in this instance, that there existed during the whole of the primary period of the disease a juxtaposition of the general nervous and cutaneous states and lichen planus; in a second period, on the contrary, the general nervous and cutaneous conditions existed alone, without any signs of lichen planus. Thus an individual, although predisposed to lichen planus, will not have a lichen planus, because he has a cutaneous neurosis, and because he scratches. Scratching may irritate the lichen planus, render it more active, transform it and make it licheniferous. The neuropathic seems especially to constitute an excellent ground, I might almost say a necessary ground, for the development of this dermatosis, but the neuropathic state and scratching alone are insufficient to cause the appearance of lichen planus in a predisposed subject.

It results, from the preceding reflections, that the treatment by hot douches, instituted so happily by Dr. Jacquet, and which is directed especially to the neuropathic element, should improve those subject to lichen planus and favor the disappearance of their eruption by protecting them from the irritation produced by scratching. They also give, however, the explanation of certain successes in which we have seen the neuropathic state become modified, but the eruption not to be materially influenced by the use of hot douches. On the other hand, this medication by hot douches seems to us to give results in a certain number of dermatoses where we observe the neuropathic general condition of which we speak, and in particular in those very special affections which the older dermatologists designated under the term lichen, and which we have quite recently studied under the name "neurodermites" or "lichenifications." I have of late attended a patient affected with rebellious pruritus of the verge of the anus, accompanied by thickening of the skin, which had caused insomnia for over a month and a half. No medication had been successful in calming it. I then had the idea of giving hot douches. From the time of the first douche, which was taken at six o'clock in the evening, the patient was enabled to sleep for two hours; after the second douche he regained his natural sleep. At the end of eight douches the local condition was so much modified that the patient considered himself cured.

We must recognize, on the other hand, that there are cases of pruritus

and of rebellious neuroses of the skin which are but little or not at all modified by this medication. We must then, as Dr. Quinquand says (see above), turn to other means of modifying the nervous excitability, and in particular must we employ hygienic measures, change of abode and surroundings, sojourn at mineral springs of a sedative nature, such as Nevis, Bains, Luxenil, Ragaz-Pfeffers, Schaugenbad.

Destruction of Hairs by Electricity.—In the April meeting of the French Society of Dermatology and Syphiligraphy, Dr. Dubrenilh, of Bordeaux, related the case of a young girl affected with hypertrichosis from whom he removed in six months' time and in about 120 sittings in the neighborhood of 1,500 hairs, or what corresponds to an average of 124 hairs to a sitting. But all the seances have not been of an equal length some being very short while others lasted for an hour and a quarter. In the latter he was enabled to destroy as high as 250 hairs. To reach such rapid results he employs a current of ten millimetres of intensity and makes an æsthesia by sub-cutaneous injections of cocaine. The results obtained by Dr. Dubrenilh are not new. In the communication that I made on the same subject to the same society in April 1891, I said that I had succeeded easily in from twenty to twenty-five minutes in destroying from fifty to ninety hairs, that in a long seance of fifty minutes duration interrupted by an interval of five minutes rest I could in courageous patients destroy 180 hairs, and that when the skin permitted I could in the same day have a second sitting which would bring the number up to 270. To reach these results, which, as I also said in my communication, render the method of destruction of hairs by electrolysis a practical one, I only need currents of from four to six milliamperes of intensity, and I also do not resort to an æsthesia of the parts by sub-cutaneous injections which I previously employed extensively but have now given up altogether considering them as capable of danger.

Lesions of the Mucous Membrane of the Mouth Kept up by Healthy Teeth.—Dr. Le Pileur has just presented to the *Société Médicale de l'Ellysée* a very interesting communication the practical importance of which strikes me as being very great. We know that carious teeth and those half destroyed may determine on the internal surface of the lips and cheeks as well upon the border of the tongue, small lesions which often come to constitute veritable small abscess of a rebellious nature. It is necessary in order to cure them that the asperities on which they depend be destroyed.

What Dr. Le Pileur has brought forward in his communication is that there are identical lesions to those of which I have just spoken which can be produced by teeth perfectly healthy but presenting a slight roughness or projection outward from the general plane of the dental arch. These lesions often come on after an accidental inflammation such as an aphtha or a burn which caused swelling of the mucous membrane might produce bringing it more into direct contact with the dental projection.

In one of the cases related by Dr. Le Pileur the lesions produced by an external angle of a canine which was sharp and cutting, resembled so much a chaneroid that a surgeon proposed its ablation. It is sufficient to have the patient wear a protecting shield made of gutta percha for a week in order to see the lesion disappear.

In another of the cases an old syphilitic, who smoked a pipe, noticed a plaque of leucoplasia upon the internal surface of the left cheek where it

was in contact with a dental projection. Without giving up the use of tobacco, and without any antisyphilitic course the patient recovered after wearing a simple protecting apparatus made of gutta percha. I believe I repeat that this communication of Dr. Le Pileur is of great practical importance, for since several years I have observed instances which completely confirm his views. I am convinced that many cases of glossitis and of chronic stomatitis, which are superficial and painful as well as many instances of leucoplasia are kept up by irregularities and projections of the dental system. We must examine whether the teeth are carious or broken; if they are not it is wrong to condemn them. Every time we have presented to us a rebellious mouth lesion and the teeth are found not to have an absolutely smooth and even surface the patient must wear a well made gutta-percha protecting apparatus.

Treatment of Syphilis by Mercurial Flannels.—It is well known that according to many authors mercurial frictions only act by virtue of the vapors of mercury which they emit, thus the patient is usually recommended to apply the friction himself and for a considerable time so as to absorb as large a quantity of mercury as possible.

I do not know for my own part up to what point this assertion is exact. What I have especially observed is that a very notable difference exists in the mode of action of mercurial frictions in different persons.

With the view of regulating the emission of mercurial vapors, and to prevent absorption of too great a quantity Drs. Vigier, Mergé and Carles have just proposed the use of flannels saturated with mercury in a state of minute subdivision. They are placed either upon the patient's chest or upon his pillow during the night. It has been found that these flannels give off mercurial vapors which the patients absorb in such quantities it can be detected in the urine. The authors think they can estimate the amount thus absorbed as from eight to nine milligrams in eight hours.

If these results are confirmed by other observers it is certain that we have here a procedure as original as it is clean and convenient for the administration of mercury to subjects in whom the digestive tube is intolerant, but the whole question calls for very serious control, experiments and observations, before the method can be adopted in general practice.

The Sub-cutaneous Injection of Corrosive Sublimate Dissolved in Oil.—Dr. Burlureau continues his curious researches in the matter of sub-cutaneous injection of oil containing certain medicinal principles. He prefers oil to all other excipients as a vehicle for sub-cutaneous injection of medicines, which have been proposed. It is more readily digested in the skin than water, liquid vaseline, or any other substance with which mercury or mercurial salts have been incorporated, and besides, the author adds, it is in itself a food of the first order which can only be very beneficial in syphilis. The injection which he uses is composed of corrosive sublimate dissolved in the dose of 0.40 in 1000 grams of sterilized oil, free from acids and filtered. Twenty-five grams of oil contain a centigram of corrosive sublimate. The dose injected varies between twenty and eighty grams of oil. The injection is made with a special apparatus of which I have spoken in one of my previous letters concerning injections of creosoted oil which the same author practices. The injection should be made in the same manner as the latter. It is quite painful and so should only be used as an exceptional thing when a decided

mercurial effect must be secured or when the stomach does not seem to tolerate mercury. It seems preferable to injections since it does not occasion mercurial eruptions and is less often accompanied by salivation. To secure solution of the corrosive sublimate in oil one must first dissolve it in ether in the proportion of one gram of sublimate to five grams of ether. This solution mixes very well with two kilograms of oil.

Success of Local Treatment in the Late Ocular Manifestations of Syphilis.—In syphilis, either hereditary or acquired, lesions of the fundus of the eye may be produced without the globe presenting any appreciable change in its anterior segment. The sight gradually declines and there is produced either a veil-like obscurity or a mist of variable intensity which comes at times to render the vision indistinct. The ophthalmoscope permits the discovery in the fundus of the globe of white patches with pigmentary accumulations at the periphery. They are sometimes described as being isolated, of very small dimensions, and at times as being disposed in large masses. In these cases ordinary treatment for syphilis very often fails. Drs. Abadie and Daner have resorted to local injections, that is to say, sub-conjunctival, of a one to the thousand solution of corrosive sublimate, one drop is injected at a time with all necessary antiseptic precautions, and these injections are repeated every second day. They may then be alternated, every day making an injection in one of the eyes. After four or five injections an appreciable amelioration takes place, and this is increased with the increase in the number of injections.

PARIS, June 30, 1892.

BROCQ.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

115TH REGULAR MEETING.

(Continued from page 332.)

Extensive Lupus of the Face and Head.—Presented by DR. ROBINSON.

DR. FOX referred to the treatment of lupus by means of a one per cent. solution of fuchsin in alcohol or collodion. He had had good results with this application at the Skin and Cancer Hospital.

DR. ROBINSON had used pyoktanin in cancer and lupus, but without result. He would rely upon the local use of iodoform, and internally give the man iodoform, and feed him with the flesh and secretions of animals not liable to tuberculosis, as fish, lobsters, etc., and the flesh and milk of goats, upon the theory that the human protoplasm takes on the molecular constitution and properties to a large extent of the protoplasm of the organisms upon which it feeds. By this course he imagines the ground may be made unfavorable for the existence in it of the bacillus tuberculosis.

Dermatitis Herpetiformis.—Presented by DR. ELLIOT.

Male; German; 80 years old. Has always been in excellent health. Does not remember ever having been confined to his bed. No history of neurotic tendency in the family could be obtained. There is no history of

alcoholism. The patient's general condition is good. In August, 1891, patient began having chills, usually occurring every day, and often night and morning. These were not severe, and were always followed by profuse perspiration. In October last, about six weeks after the chills began, a severe pruritus occurred in the middle of the patient's back. This was soon followed by an eruption in this region. Shortly afterwards a similar eruption appeared on the extensor surfaces of both thighs. Subsequently the eruption became general. The chills continued daily as before.

When patient came under observation, he presented a general eruption. This was characterized by its arrangement in patches, varying in size. These patches were more or less infiltrated, and thickened, with elevated papules and vesicles on their surface. There were many signs of intense itching, namely, scratch marks, broken papules and vesicles, and streaks of inflamed skin. Here and there the patches were pigmented. The lesions were arranged on these infiltrated bases, in distinct groups, and everywhere showed a tendency to aggregate. The eruption is general, the face alone being free. The scalp is affected only in its posterior half. Daily examinations show marked changes in the eruption. The pigmentation at times is absent. The vesicles may be entirely absent. At other times the papules almost disappear. At other times still the papules vary so in size that the largest closely resemble the wheals of an urticaria. The entire skin, almost, is inflamed, more at one time than another. The itching is intense and persistent. The patient wears an anxious look all the time. He sleeps very little, even under hypnotics. The chills occur twice daily and are followed by profuse perspiration. Early in the disease the patient observed that new lesions followed these chills. His appetite is poor. He is restless, rarely sitting still for half an hour at a time.

DR. CUTLER thought the case one of pruritus senilis, and the lesions present due to scratching. There was some little grouping of the lesions which suggested a dermatitis herpetiformis.

DR. ALLEN was inclined to view the affection as a pediculosis corporis rather than a dermatitis herpetiformis. He would not exclude the former condition until the patient was removed from all infected clothing for a month. He cited an instance where all clothing excepting the suspenders had been furnished new to the patient and still pediculi continued present. In several cases a scapular about the neck had contained ova and prolonged the affection in bed cases.

DR. ROBINSON saw nothing about the case that would lead him to make a diagnosis of dermatitis herpetiformis at the present time. There was an absence of vesicles, bullae or erythematous patches. The whole process impressed him as one of pruritus in an elderly person, possibly complicated with pediculosis corporis.

DR. BRONSON thought the essential condition in the case was a pruritus on which incidentally prurigo papules or grouped lesions, as in dermatitis herpetiformis, might occur. He recalled a case in which he had made the diagnosis of pruritus senilis where later typical lesions of dermatitis herpetiformis developed.

DR. FORDYCE had at present a patient under observation with a chronic recurring dermatosis in which the only lesions present were urticarial wheals disseminated and grouped. It was a question with him whether to call the eruption a dermatitis herpetiformis or a chronic urticaria.

DR. ELLIOT had noted on first seeing the case the presence of closely aggregated grouped vesicles and papules. Since that time, frequent changes in the appearance of the eruption had taken place, sometimes papules and at other times urticarial-like lesions being present. The papules were dense and pale in color and about the size of a small pea. His diagnosis had been based not alone upon the multiformity of the lesions but also upon the chronic course of the eruption, the frequent relapses and the intense subjective sensations of the patient. The patient had been in the hospital for two weeks, had been closely observed, had had baths and complete change of clothing and there was absolutely not the remotest possibility of pediculosis corporis being present.

Case for Diagnosis.—Presented by DR. MORROW.

The patient, a female, aged 25 years, had noticed for some weeks before coming under his observation the presence of purplish-red slightly elevated spots irregularly distributed over the face. Examination reveals the presence of a dozen such spots, varying in size from that of a split pea to spots as large as a silver half-dime; they are irregular in outline, somewhat infiltrated, and nowhere show any scaling. One or two slightly depressed pigmented patches are to be seen, indicating lesions in process of retrogression.

DR. FOX said the diagnosis was obscure. Had there been scaling over the patches he would consider it a lupus erythematosus. He had seen patches of lupus erythematosus disappear spontaneously, leaving a very superficial scar.

Molluscum Contagiosum.—DR. FORDYCE presented a young woman, aged 30 years, who had about a dozen minute tumors not much larger than a pin's head situated on the inner aspect of both thighs, just above the knees. The tumors showed a central depression from which a little white fluid could be expressed. The patient stated that the eruption had been present for six weeks, and had developed upon the sites occupied by an eruption caused by poison ivy during the past Summer.

Bullous Eruption of the Face—Presented by DR. FOX.

A boy of 14 years presented a combination of pigmentary patches and recently developed bullae upon cheeks and ears. This eruption had recurred once or twice every year since infancy, the eruption in each attack lasting a few weeks. Superficial cicatrices were to be seen upon face and backs of hands.

DR. ALEXANDER asked if it could be classed as an erythema, with so much atrophy of the tissue?

DR. FOX thought the disease would sometimes leave superficial cicatrices.

DR. ELLIOT said the eruption looked like an artificial one. Scars only resulted, he thought, from an erythema from scratching and secondary infection; the bullae are formed very superficially.

DR. FOX said the eruption had existed for twelve years and began when the boy was three years of age, at a time when one would not think of a feigned eruption.

DR. LUSTGARTEN looked upon the eruption as due to some nervous disturbance.

116TH REGULAR MEETING.

DR. GEORGE H. FOX, *President in the Chair.*

Case for Diagnosis.—Presented by DR. FORDYCE, in behalf of Dr. Morrow.

The patient, a man aged 48 years, gave a history of several venereal sores, twenty years ago. He does not recall any secondary eruption. Has been a drinking man. One year ago a number of abscesses appeared on the neck, and in the axilla, which have persisted since that time and have discharged considerable pus. These abscesses were followed by a vesicular eruption over the body, lasting for two months; it then disappeared without treatment, but reappeared after six months in the form now present. The patient has lost considerable weight. Antisyphilitic treatment has been without success. An examination reveals the presence of enlarged and suppurating lymphatic glands in the cervical and axillary regions. The patient's back is covered with large irregularly shaped brownish-red patches, the color of which does not entirely disappear on pressure. Surrounding these patches are small vesico-pustules.

In addition to the lesions mentioned disseminated vesicles and pustules are present over the back.

A characteristic specific ulcer, crescentic in outline, is present over the anterior surface of the right leg.

DR. BRONSON thought the case one of syphilis and the infection of more recent date than the patient's history would indicate.

DR. FOX looked upon it as a case of syphilis engrafted upon a tuberculous base.

Syphilis with Keratoma of the Palms and Soles.—DR. HALSTEN (by invitation), presented the case with the following history.

M. H. aged 45 years, twice married; no positive history of infection, or of eruption on herself or either of her husbands. Three children, first two died of croup and diphtheria, third living and healthy. Present condition began over two years ago, on fingers and toes of right hand and right foot and gradually extended until entire foot and hand became involved. The toes, inner and outer aspect and portion of dorsum are covered with a thick, warty growth; just above the ankle are several syphilitic ulcerations. Palm of hand also covered with a patch of thickly set verruca. Above the wrist syphilitic infiltrations. Left hand and foot, as well as rest of body free from any signs of syphilis.

DR. TAYLOR said it seemed to him a complication in which syphilis acted as an irritant and not an essential syphilitic lesion.

DR. ELLIOT said there was no evidence suggestive of the case being one of syphilis vegetans: the lesions, he thought, were independent of syphilis, and simply the result of the infiltration and irritation of the tissues.

DR. BRONSON considered the case one of syphilis, and the papillomatous growth an accident. He thought all papillomatous formations in syphilis were accidental and not directly due to the specific poison. In syphilis, however the conditions were favorable to the formation of such growths. When such a long continued warty condition of the feet was met with he always inferred that the patient was syphilitic, not because it was in itself a direct manifestation of syphilis but because he knew of nothing else than a prolonged syphilitic infiltration that would be likely to produce it.

DR. FOX referred to the unilateral distribution of the palmer and planter lesions in syphilis as a useful rule in diagnosing them from scaly eczematous lesions of these regions.

DR. ELLIOT said the papillomatous formation met with in elephantiasis and chronic eczema were identical with the appearance seen in the patient presented. As long as the condition was a epiphenomenon he would not consider it belonging to syphilis any more than to the other affections named.

Case of Multiple Gummata of Leg, Undergoing Resolution and Cicatrization without Ulceration.—Presented by DR. ELLIOT.

DR. ELLIOT presented the case in order to elicit discussions for the reason that the manifestations were, he thought, rather uncommonly met with. The patient, a young girl, could give no history bearing in the slightest degree upon the origin of the disease. The testimony as to its being acquired or hereditary were equally negative. She stated that it had begun eight to nine months before as one firm dark red lesion, and this was followed by others grouped around it. No ulceration had occurred, but involution would take place and be followed by marked atrophy. At present a space about three inches square was occupied by the dermic infiltration and the cicatrization. There were no subjective symptoms. Under local and internal specific treatment, resolution had begun and was going rapidly forward.

DR. ALLEN believed the subcutaneous tumor to be a gumma. He recalled an obstinate case of sciatica which in the absence of any specific history was found to depend upon the pressure exerted upon the nerve by a gumma in the popliteal space discovered only after the pain had existed for some time. A complete cure resulted from the use of antisyphilitic remedies.

DR. TAYLOR said that he had described a similar condition in syphilis in the fifth edition of Bumstead and Taylor. A nodule develops painlessly in the subcutaneous tissue, and forms a hardened mass with the epidermis; daughter nodules form round and at some distance from the parent nodule until eight or ten make their appearance. They run an aphlegmasic course and disappear leaving a slight atrophy of the skin, or ulceration may take place.

Pityriasis Rubra Pilaris with Appearances of Lichen Planus.—Presented by DR. BRONSON.

The patient was a shoemaker 30 years of age. Three or four months ago the eruption from which he is now suffering first made its appearance. Previous to that his skin had always been healthy. The disease first showed itself in the form of scaly patches upon the palms, next a breaking out was noticed on the chest whence it extended toward the neck and abdomen. At the same time noticed that the skin of the soles was similar to that upon the palms. Eruptions later appeared upon the arms, in the axilla and about the genitals and thighs.

When first seen the features of the exanthem were about the same as now. The patient being stripped the disease was most noticeable upon the chest where the whole sternal region appeared of a dull red color, somewhat scaly but in the middle portions showing no distinct or discrete efflorescences. At the borders, however, there was a thick mass of little hard, horny eleva-

tions, for the most part acuminate, though many of them showed a flattened summit. Some were considerably larger than others and looked as though formed by peripheral growth of a single papule and not by coalescence of several papules. Most of the papules at the outskirts of the patch were miliary and acuminate. Similar patches (confluent in the center with discrete efflorescences outside), occurred on the anterior surfaces of the arms upon the pubes and upon the nates. Upon the scrotum there were peculiar thickenings about the follicles but no acuminate papules. Just above the pubes the eruption in places assumed the linear form and consisted chiefly of very superficial and flattened papules. The backs of the fingers were studded with numbers of discrete hard dull red acuminate papules. The nails were ill formed with an accumulation of epidermic detritus underneath. The palms and soles are dry, rough and scaly, though the patient states that at present the itching is only moderate, bloody crusts scattered here and there show that there has been scratching. He admits that at first the itching was considerable. The scalp is scaly but shows no distinct efflorescences.

DR. ALLEN had seen the patient by daylight when he presented a different appearance. There were typical papules of lichen planus present as well as the characteristic features of pityriasis rubra pilaris.

DR. ELLIOT said the case was in every respect identical with that of the Italian woman whom he had presented some time before to the society, which all the gentlemen agreed was an example of pityriasis rubra pilaris. In his case certain lesions resembling those found in lichen planus were also present, but the resemblance was only an apparent one, as they could be scratched off easily with the finger nail being composed only of epidermis.

DR. FOX regarded the case as identical with others which had been presented to the society as cases of pityriasis rubra pilaris, and he considered the same disease as the lichen ruber of Hebra.

He preferred the name of lichen ruber, as he considered Hebra's description of the disease a better one than Devergie's.

He did not think the presence of a few flattened shiny papules characteristic of lichen planus, as the same papules were sometimes met with in eczema.

DR. ELLIOT objected to the name lichen for this disease, as the papules in lichen were primarily and always formed in the derma while in pityriasis pilaris they were epidermic in origin.

DR. BRONSON said when he first saw the case he noticed at the periphery of the patches, which were generally characteristic of pityriasis rubra pilaris certain small papules which enlarged at the periphery, became flattened and shiny, and which also in some places occurred in the form of striae. There were some large papules that apparently could not have been produced by the aggregation of papules originally discrete, as would be the case in pityriasis rubra pilaris; for in the latter affection uniform patches are formed by confluence of the papules not as in lichen planus by peripheral growth of each separate papule. These features of the disease led him to believe that there must be a combination of lichen planus and pityriasis rubra pilaris.

Molluscum Fibrosum.—Presented by DR. SHERWELL.

Geo. G., U. S. Family history good. Never been sick except ordinary exanthemata. About a year ago had sore on penis with non-ulcerating ade-

nopathies in right groin. Has adenopathies marked on that side now; was treated at the time for four months; has had no treatment since, nor any symptoms requiring treatment. Came to clinic about fourteen days since complaining of lumps which were forming in and under the skin in various parts of the body; he declares that the first appeared in the upper right arm (two in number) as far back as four years ago, thus antedating venereal ulcer. They now are appearing all over the body, at least 25 to 30 in number, and rapidly increasing in number.

DR. ALLEN said the tumors looked like lipomata.

DR. KLOTZ referred to a similar case where he had removed one of the tumors and found it to be a lipoma.

A Case of Paget's Disease Treated with Fuchsin.—DR. ELLIOT read a paper with this title (see July No. of this Journal).

DR. ROBINSON had used fuchsin without any benefit in epithelioma.

DR. PIFFARD thought the introduction of the aniline dyes marked a distinct era in therapeutics. It was possible for certain dyes to form chemical combinations with certain micro-organisms. He was not surprised to know that Dr. Robinson had met with no success in the use of fuchsin, while Dr. Elliot had obtained good results, as there were various preparations of rosaniline sold under the name of fuchsin which might have different therapeutic effects.

The hydrochlorate of rosaniline reacts better with tubercle bacilli than the other preparation of the dye.

DR. SHERWELL said he had in 1881 showed the first case of Paget's disease before this Society.

The experiments with pyoktanin in eye disease that he had seen had been unsuccessful.

DR. LEWIS referred to a case of Paget's disease which had resisted local treatment for a year; he had presented it to this Society, and the members had advised the continuance of the local treatment. The patient recovered completely without operation.

Fuchsin had been used by him extensively in the Skin and Cancer Hospital with indifferent success. The chloride of aniline, given hypodermically for cancerous affection, had proved of sufficient merit to warrant him in continuing its use.

DR. FORDYCE referred to certain laboratory experiments with fuchsin and pyoktanin, which showed that they in no way influenced the growth of pure culture of pyogenic or other germs.

DR. FOX had had better success with fuchsin than with the majority of new remedies. In the treatment of ring-worm of the scalp a one per cent. alcoholic solution gave him better results than other methods of treatment.

He has seen the eruption in eczema marginatum disappear after one or two applications of this drug.

DR. TAYLOR referred to a case of blenorrhagic cystitis of some months' standing which he had treated with pyoktanin. He ordered the drug to be given in doses of three grains; by some mistake the patient took six grain capsules; after several doses he developed an intense erythema of the face and hands, which lasted three or four days. His urine was not discolored by it.

DR. ELLIOT, in closing, said his patient had been under the care of

some of the most prominent surgeons of New York without obtaining relief.

The fuchsin had been the only thing that had given her a particle of relief or comfort. As soon as anything else was used the pain and itching returned. Fuchsin had also given him excellent results in certain of the parasitic skin affections, notably in those eczemas which he was accustomed to regard clinically as parasitic in origin. In varicose ulcers of the leg he has had some good results from its use.



Photo-micrograph of Molluscum Contagiosum.—(See cut.) Presented by DR. FORDYCE.

DR. FORDYCE said, inasmuch as some doubt had been expressed at the last meeting regarding the diagnosis of the case which he has presented as an example of this disease, he had excised a small tumor and examined it microscopically. It proved to be a typical molluscum contagiosum. Dr. Pilfard had kindly photographed the section for him.

Selections.

Duration of Treatment in Syphilis.—DR. HEILMANN (*Wratck* No. 13, 1891.
Journal de Médecine No. 47, 1891).

In speaking of the duration of treatment evidently refers to the first "cure" considering subsequent manifestations as relapses. He has compared treatment by calomel injections, mercurial frictions, and mercury by the stomach in 843 cases of recent syphilis without complications and without previous treatment and found the mean duration of treatment was 49.8 days. The smallest mean duration was 41.4 was furnished by subjects ranging from sixteen to twenty years of age. For those between twenty-one and thirty years the average duration was 47.5 days. Women required a longer treatment than men. The average of treatment by calomel injections was 46.6, by mercurial inunctions 51.1, and by mercury internally 56.6.

C. W. ALLEN.

Melanotic Sarcoma of the Skin. DR. ATTILIO CATTERINA (*Gazzetta degli Ospitali*, No. 67, 1892).

The writer has had an opportunity to study three cases of this rare disease in Professor Bassini's surgical clinic, at Padua, Italy. He paid especial attention to the histology of the affection and its differential diagnosis from growths simulating cancer. He concludes as follows:

1. Melanotic sarcoma of the skin usually develops from the papillæ and connective tissue of the derma. The cells are fusiform and of an alveolar type. The rete malpighii undergoes special changes, the most important of which is that at the peripheral portions of the neoplasm. The malpighian layer forms the source of supply of the pigment itself, by which it is easily diagnosticated from a cutaneous carcinoma. In sarcomata, as well as in carcinomata, the neighboring glands are attacked. In carcinoma ulceration is generally present; in sarcoma, on the contrary, absent.

2. Finally, the pigment is not of hæmatic origin, but is elaborated by the cells of the tumor themselves, which in turn undergo great changes in form and size, so that they resemble elements of epithelial origin.

F. H. PRITCHARD.

Essence of Turpentine in Erysipelas. DR. LUIGI D'AMORE (*Il Progresso Medico*, Nos. 11 and 12, 1892).

The writer has experimented on a vast scale in Professor Semmola's laboratory, at Naples, with turpentine and its action on erysipelas. It does not injure the kidneys, even from a long-continued use, merely giving the urine a violet-like odor. It causes no disagreeable complications, relieves the sensation of tension and heat, calms the pains and reduces the disease to an average of five days from the time of application of the drug to the appearance of desquamation. It arrests and circumscribes the inflammation from the first day. It may be applied with a brush or rubbed on with a tuft of cotton.

F. H. PRITCHARD.

Morbus Maculosus Werlhofii. DR. CIACERI (*Gazzetta degli Ospitali*, No. 61, 1892).

The writer successfully treated a case of morbus maculosus Werlhofii in a young and robust girl, with gallic acid, ergotine and quinine, internally.

She was given snow to eat, and it was applied to her abdomen. In a few days the hematuria ceased, the macules and hemorrhagic spots disappeared.

F. H. PRITCHARD.

Items.

The American Dermatological Association, will hold its Sixteenth Annual Meeting at the Pequot House, New London, Conn., September 13, 14, and 15, 1892. The following programme has been announced: President's Address, Dr. E. B. BROXSON. *Papers*.—Iodine and Carbolic Acid in the Treatment of Skin Diseases, by Dr. C. W. Cutler; Additional Note on the Treatment of Erysipelas based upon a second series of fifty cases, by Dr. C. W. Allen; A Suggestion for operative procedure on Erectile Naevi over Fontanelles, etc., by Dr. S. Sherwell.

How should Dermatology be taught? by Dr. G. H. Fox; A somewhat unusual case of Lupus Ulceration of the nose, by Dr. H. W. Stelwagon; Lupus Vulgaris following exposure to tuberculous Sputa, by Dr. W. T. Corlett; Notes on the treatment of lupus Erythematosus, by Dr. J. Zeisler.

Discussion on Alopecia Areata: 1. Are there two forms of Alopecia Areata; one parasite and one neuropathic? 2. Is there sufficient evidence to prove the contagious nature of the disease? 3. Does arsenic or any other internal remedy influence the course of the disease? 4. What is the comparative value of carbolic acid, and of other topical remedies? 5. Will epilation of the margin of the patch prevent its spread? 6. What circumstances influence the Prognosis of the disease?

Alopecia Prematura; its most frequent cause, by Dr. G. T. Elliot; Cases of Favus Contagion from the lower animals; by Dr. S. Sherwell; Some observations on the Growth of Achlorion Schoenleinii in America, by Dr. L. Heitzmann.

Morphoea Atrophica, by Dr. R. W. Taylor; Psorospermiosis, by Dr. M. B. Hartzell; Report of a case of Adenoma Sebaceum, with microscopic drawings, by Dr. J. A. Fordyce; Concomitance and Sequence in Skin Eruptions, and the influence of one dermatosis upon another, by Dr. C. W. Allen.

The Cicatrices of Syphilis, by Dr. J. N. Hyde; An unusual case of Syphilis, by Dr. R. B. Morison; An exaggerated case of Impetigo Contagiosa, by Dr. G. T. Elliot; Notes on a recent visit to the Leper Hospital at Havana; Leprosy in Charleston, S. C., etc., by Dr. W. T. Corlett; Notes on the use of Thilauin, by Dr. G. H. Fox.

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Original Communications.

IMPROVED INSTRUMENTS FOR CRUSHING AND REMOVING URINARI CALCULI, WITH TEN CASES ILLUSTRATING THEIR USE.¹

BY

GEORGE CHISMORE, M.D.,

San Francisco, Cal.

IN a paper entitled "Litholapaxy," presented to the Society at its session in 1890, I brought to your notice my combined crushing and evacuating lithotrite. Since that date I have improved the instrument in several particulars, and designed a wash bottle to use with it that is simple and efficient. The belief that these instruments are worthy of trial, and that they will afford substantial aid in dealing with stone by Bigelow's Method, has led me to submit them for your consideration.

The lithotrite, originally intended for fragments only, has proved so useful in my hands that I rarely employ any other now. Stones removed by its aid have to be crushed much finer because of the small calibre of the evacuating channel. Yet, such is the facility with which fragments are caught, drawn as they are into the jaws by the current passing to the aspirator—hunting the instrument instead of being groped for—that the time of operation is not lengthened. If the catheter should become choked with fragments while crushing, it is easily cleared by a stylet without removing the lithotrite. The débris will weigh somewhat less in proportion to the size of the stone

¹ Read before the Sixth Annual Meeting of the American Association of Genito-Urinary Surgeons.

before crushing, owing to its loss, under the form of fine grit, in the fluid used in aspirating.

To meet cases of stones or fragments too hard to be crushed by hand, I first added an extra male blade made solid and furnished with Bigelow's lock and screw power, which could be exchanged in a moment, both fitting the same female blade. This worked well, but such was the value of the current in finding fragments in difficult cases of enlarged prostate that I had another male blade made with a channel of sufficient size to enable the aspirator to suck pieces into the open jaws, yet leaving metal enough to allow the application of the screw.

I have three sizes of this lithotrite which I show you; in practice I find the smallest the most useful. (See Fig. 1.)



FIG. 1.

The wash bottle consists of but two pieces and is very simple in construction—a rubber bag so shaped as to fit the hand comfortably, containing a short, fixed, curved tube, and a glass reservoir. The soft rubber nozzle fits quite a range of different sized instruments—lithotrites or catheters—and is detached or coupled on with ease. It affords a very short route for the fragments to travel, and does not return any that have once reached the reservoir. It works well with Bigelow's or Otis's evacuating tubes. It can be thoroughly cleaned after an operation by boiling, if required. In combination with my lithotrite it makes an excellent searcher for finding and removing foreign bodies in the bladder. (See Fig. 2.)

My method of using these instruments is as follows: Remove the male blade. Soap the shaft well (Packer's tar soap is excellent for this purpose) to prevent ingress of air between the outer and inner tubes during aspiration. Put the lithotrite together, lubricate well, and pass it into the bladder with the cock closed. If the stone is not quickly seized, fill the wash

bottle by sinking it in a pan large enough to admit of complete immersion in the fluid to be used for aspirating, and compressing the bulb until all air is excluded. Then couple on the lithotrite, open the cock and commence aspiration, gently opening and closing the jaws of the lithotrite until the stone is grasped. Then turn off the cock, disconnect the wash bottle, and proceed to crush.

I use two wash bottles, my assistant emptying and refilling one while I am using the other.

In practice I find by far the most of the crushing is easily and quickly done without the use of the screw power, holding the female blade firmly with the left hand and forcing the male blade home with the right. To avoid blistering the palm of the hand during this process, I have had constructed a light, hard

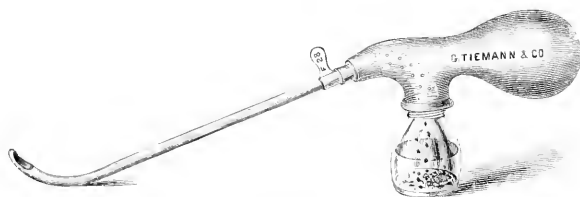


FIG. 2.

rubber cap fitted to the nozzle of the male blade, which is easily adjusted and can readily be removed.

By means of the stop cock and wash bottle the fluid in the bladder may be increased, diminished, or changed with the greatest ease. Indeed, several times during an operation it is well to open the stop cock and empty the bladder. If any air has entered it, it escapes with the water. If more cocaine is needed, it is injected through the lithotrite before a fresh supply of the aspirating fluid is thrown in.

The following ten cases are consecutive upon the fifty previously reported to this Society, and comprise all the litholapaxies I have made to date. I have therefore retained the case number as taken from my Register.

Case 51. Dr. A. B. A. German, æt 70. Ailing three years; confined to room last twelve months. Began catheter life over a year ago. Has to pass catheter hourly. Prostate greatly

enlarged. Urine ropy, alkaline; contains blood and pus and 12 albumen. Completely broken down by suffering and loss of rest.

Operation April 1, 1890. Bladder cocainized, no other anæsthetic. My lithotrite smallest size. Phosphate 59 grains. Size of grasp $2\frac{3}{4}$ centimeters. Time 40 minutes. Complete recovery without incident. Still uses the catheter, but without pain and from three to five times daily. Has resumed practice of his profession from which he retired three years ago on account of his vesical trouble, and is now hard at work.

Case 52. T. P. Swede, æt 44, longshoreman. Strong and healthy except for intolerable vesical distress that has rendered him unable to work for more than a year. Very frequent and painful micturition. Kidneys sound, no cystitis.

Operation April 7, 1890. Cocaine. My lithotrite. Uric acid stone. Very hard $1\frac{1}{2}$ centimeters. Weight 20 grains. 40 minutes. Recovery perfect; was out the next day. Remains free from any vesical trouble to the present time.

Case 53. J. C. K., æt 36, druggist. Unable to work for over a year on account of intense vesical distress. Otherwise in fair health.

Operation August 21, 1890. Cocaine. My lithotrite. Mixed oxalate and urate, 3×2 centimeters, weight 148 gr.; 60 minutes. Pain in the deep urethra followed. Had a chill. Temperature rose to 103 degrees. On the third day copious hemorrhage set in, ceasing suddenly with the expulsion of a large clot. Subsequent recovery rapid and complete. Remains well to date. The clot was thrown out by a nurse without examination. It probably contained a large fragment.

Case 54. T. R. S., æt 61, accountant. I removed a large oxalate on November 3, 1884, by litholapaxy. In 1889 he began to void urine with difficulty. On examination, the prostate was found enlarged and there were four ounces residual urine. Catheter advised but advice neglected until an attack of retention came on. In relieving the retention a stone was discovered. An attempt to crush it failed. Could not catch it with Bigelow's lithotrite and could not crush it with mine, although I could seize it readily. This led to the addition of a solid male blade and screw power to my instrument.

Operation January 3, 1891. Cocaine. Oxalate. Very hard. $3\frac{1}{2}$ centimeters, 96 gr. One hour. Condition alleviated, but still felt more or less heat and burning in the deep urethra. Prostate greatly enlarged. Moderate cystitis. Able to continue his work.

In this case I tried many times to seize the stone with Bigelow's lithotrite and failed. I could not catch it with my own instrument with the solid male blade, so I seized it by the aid of the combined lithotrite, carried it to a favorable locality,

dropped it, removed the lithotrite, changed the blade, and was then able to catch the stone and crush it easily.

Case 55. S. J., æt 68. Jew. Ward politician. Cystitis, much suffering during the last two years. Urine albuminous, fœtid, ropy. Has not used catheter although his previous attendant had urged him to do so.

Operation October 11, 1891. Cocaine. My lithotrite and new wash bottle. Phosphate. $3\frac{1}{2}$ centimeters, 164 gr. Time, 1 hour. Recovery. Is now in good health but uses the catheter regularly four or five times daily.

Case 56. G. S., æt 62. Catheter case. Prostate greatly enlarged. Operation November 22, 1891. No anæsthetic. My improved lithotrite and wash bottle. Oxalate, $1\frac{1}{4}$ centimeters, 83 gr. Time 20 minutes. Patient walked to the office and walked home. I had no assistant. He went to work the next day.

Case 57. R. S., æt 62. Catheter case. Operation January 6, 1892. Oxalate, $1\frac{1}{4}$ centimeters, 57 gr.; 20 minutes. No assistant. No anæsthetic. My improved lithotrite and wash bottle. Walked to my office and walked away. Recovery without incident. At work two days afterward.

In this case I had failed to seize the stone on several previous attempts with Bigelow's and my instrument with solid blade, on account of enormous enlargement of prostate. With my smallest lithotrite with screw male blade, having a channel of calibre of 11 millimeters, with the aid of the wash bottle, the stone was quickly caught and easily crushed. I have removed several small calculi—not fragments—at different times since the operation, catching them in the eye of a Bigelow aspirating tube. They are submitted for your inspection. The man is now fairly comfortable. Slight cystitis. Uses catheter from four to six times in the 24 hours.

Case 58. L. G., æt 72, French. Carpenter. Confined to his bed by vesical distress. Uses the catheter at irregular intervals.

Operation January 14, 1892. Cocaine. My instruments. Uric acid stone. Very hard. 3 centimeters. Weight 130 gr. Time, 60 minutes. Recovery rapid and complete, except that he now uses the catheter regularly four times in the 24 hours. Is up and attends actively to his affairs.

Case 59. J. S., æt 62, Irish. Policeman. In great distress: confined to his bed. Prostate slightly enlarged, but he does not use catheter.

Operation March 1, 1892. Cocaine. My instruments; Bigelow's lithotrite for first crushing as the stone was very hard. size $3\frac{1}{2}$, weight 196 gr., Time 80 minutes. Recovery without a

bad symptom. Is now attending to his business. The reason for using Bigelow's lithotrite in this case was that my own with screw power was in New York undergoing alteration at the time of the operation.

Case 60. J. C., at 62. American. Fireman. Retired on pension on account of vesical distress.

Operation April 19, 1892. Cocaine. My instruments. Smallest size. 40 minutes. Oxalate, 2 centimeters, 40 grains. Recovery without a bad symptom. Is now free from vesical distress.

The calculi removed in the foregoing cases are herewith submitted for your inspection. It will be noted that the fragments are much coarser in Case 59, the only one in which Bigelow's lithotrite and tubes were used for a preliminary crushing and aspiration.

Owing to the disposition of the metal in the male blade of my lithotrite, the possibility of spreading the jaws during an operation, either from too much force applied or fault in construction of the instrument, has occurred to my mind. To avoid such an accident, the instrument should be well tested on bits of coal, brick, etc. If such a mishap should occur, and the operator be unable to withdraw the lithotrite, a supra-pubic cystotomy might be done and with a pair of strong forceps the blades be bent back to place. In none of my cases has there been the slightest difficulty of this nature, still I have a pair of strong forceps in my case in order to be prepared for such an emergency.

THE USE OF IODINE, CARBOLIC ACID AND CHLORAL IN DERMATOLOGY.¹

BY

CONDUCT W. CUTLER, M.S., M.D.

Professor of Dermatology, University of Vermont.

MR. GEO. L. F., aged 27, called at my office on July 20, 1890, with the following history: About six months ago he noticed a little itching about the pubis. Having been once affected with crab-lice, he attributed this itching to a similar attack, and applied remedies which he had found pre-

¹ Read before the Sixteenth Annual Meeting of the American Dermatological Association.

viously beneficial. Instead of an improvement, however, the itching became worse, and the area of redness, which he attributed to the scratching, became increased in size. He then consulted a physician, who told him his trouble was eczema, and began a course of treatment for its cure. As the disease, instead of showing an improvement, continued steadily to increase, he consulted a specialist in skin diseases, who confirmed the diagnosis of eczema and advised a different plan of treatment; but even this change of treatment resulted in no improvement, and the disease, which at first was limited to the pubic region, began to extend down the inner sides of the thighs, spreading from the centre toward the periphery by a well-marked, raised, circular margin: while new areas of the disease also developed on the inner sides of the thighs.

After being under treatment for several months and deriving no benefit, he consulted another specialist, who told him that the disease was often called eczema, but was really a form of ringworm which was very difficult to manage, always taking a long time to effect a cure.

Another method of treatment was inaugurated and continued for two months without benefit, the disease still showing a tendency to spread and without any signs of improvement. By the advice of his physician he decided to try the benefit of a different climate, as the disease was beginning to affect his general health, so he came to New York and placed himself under my care. On examination, I found the skin of the pubis, lower portion of the abdomen, penis and inner sides of the thighs extending backward about the anus and buttocks, reddened and thickened, presenting a well-defined, marginate, raised border separating it from the normal integument. Around the borders of this patch were a few discrete, pin-head sized papules and papulo-pustules, some of which were perforated by a hair. The inflamed area of the skin was of a dark red color, boggy to the feel, scaly, and covered in places with yellowish crusts which could be quite easily removed, leaving a denuded surface that exuded a little serum, giving the general appearance of an eczema. The history of the disease, its method of extension, the well-defined, raised, marginate borders, and its rebelliousness to treatment, left no doubt in my mind that I had to deal with a well-marked case of *eczema marginatum* of Hebra, or *tinea trichophytosis cruris*, as we consider it to-day. The patient had worried very much about the disease, but otherwise than being slightly anæmic, I could not discover that

his general health had in any way suffered. The itching, however, annoyed him terribly, kept him awake at night and made him very nervous and irritable. Recognizing that all the usual plans of treatment had been tried thoroughly, I decided to begin at once a somewhat different method of treatment than had been previously adopted in this case. The patient was ready to submit to any plan of treatment I could hold out to him with encouragement, no matter how painful or how closely it might confine him to the house. He was even willing to go to bed and remain there, if necessary, so that I met with no opposition or neglect to carry out my instructions to the letter, and to these facts was largely due the good result of the plan of treatment which I will now describe :

The affected region was first thoroughly shaven, and as the process was a painful one, owing to the severity of the inflammation, a lather was made with a 4 per cent. solution of cocaine, after which the process was accompanied with very little difficulty. The raised marginate edges and the papules and papulo-pustules surrounding were then painted over with a solution of equal parts of tincture of iodine, chloral and pure carbolic acid. The pain resulting from this application was very severe, but soon controlled by an ointment composed of twenty grains of cocaine and an ounce of the ointment of roses, which the patient was allowed to keep on until all pain subsided. An ointment consisting of one part of the ointment of carbolic acid, two parts of the ointment of liquid tar and five parts of diachylon ointment was then ordered to be kept continually applied to the whole inflamed area, and changed night and morning. On the third day the diseased area was thoroughly cleansed with soap and hot water, to which was added some bicarbonate of soda. The result of treatment so far was very satisfactory. The disease had not spread at all, the borders were less elevated and less distinct, and the itching less pronounced. The same treatment was again resorted to, only this time the whole surface of the lesion was lightly gone over with this solution of chloral, iodine and carbolic acid, then the cocaine ointment, and afterward the ointment of carbolic acid, tar and diachylon was applied as before. At the end of the next three days the disease had very decidedly improved in appearance. The induration was very much lessened, and here and there the redness had nearly disappeared. The raised, marginate border had flattened down greatly, the skin was less boggy, the scales had entirely disappeared, and the itching was

not complained of at all. At the end of ten days' treatment, the solution of carbolic acid, iodine and chloral being applied every third day, islands of normal skin made their appearance here and there throughout the affected area. The margin, which was no longer raised, was intercepted here and there by normal integument.

The strong application, used every third or fourth day, was now only made to the diseased area, and then but very lightly, but the tar ointment was still continued.

At the end of three weeks the patient returned to his home cured, a slight pigmentation being all that remained of his disease. As a precaution to prevent any further return of this disease, I gave him a wash of two grains of the bichloride of mercury to the ounce of rosewater, which was to be applied to the affected area once or twice a day for a month.

It is now two years since this patient passed from under my care, but it was only a few weeks ago that I heard from him, stating that there had been no return of the trouble. Here, then, was a case of parasitic skin disease which had lasted for over six months, treated the greater part of the time in the most approved manner without benefit, yet yielding in three weeks to a plan of treatment which has since then proven very satisfactory in my hands, used either in the method just described or modified to suit the case.

The use of iodine, carbolic acid and chloral in dermatology is, I know, nothing new, for either alone or in combination with other agents they have been recommended in many diseases of the skin, and are used with benefit. Thus, iodine was strongly recommended by Hebra in lupus, lentigo and chloasma, and in small-pox to prevent pitting, while as a remedy for erysipelas and ringworm it has been used for many years.

Perhaps there is no other drug which enters more frequently into prescriptions for diseases of the skin than carbolic acid, although after closely studying the literature on the subject I find it very infrequently used in its pure state unless to ulcerated surfaces, lupus and condylomata; but in combination with other substances, thus reducing its strength, it is very frequently used in the parasitic skin affections, chronic eczema, pruritus, and in fact, nearly all the diseases of the skin in which itching is a marked characteristic, for the purpose of relieving this troublesome symptom.

Chloral, although used much less frequently than either carbolic acid or iodine, finds its way very frequently into pre-

scriptions, it having, like carbolic acid, marked antiseptic and antipruritic properties.

If we study the physiological effects of these agents on the skin we find that iodine is a rubefacient, staining the skin yellow, and coagulating the albuminous agents, thus being an antiseptic and showing a decided tendency to hasten the absorption of all inflammatory products.

Carbolic acid is a superficial escharotic, turning the skin a white color. It first produces a burning pain, which is quickly followed by marked anaesthesia of the part to which it is applied. It forms a chemical combination with fat and coagulates albumen, thus being a very strong antiseptic rapidly destroying micro-organisms. It also possesses, to a marked degree, the property of hastening the absorption of inflammatory products.

Chloral is also a rubefacient, producing some redness and heat in the skin followed by marked anaesthesia, especially to subjective sensations. Its antiseptic properties are also well marked. When we combine these agents in equal parts we obtain a solution which is not a mere mixture but a complex chemical compound which acts as a rubefacient, staining the skin a light yellow. A slight, stinging pain is first produced, which is soon followed by a decided numbness of the skin over which the solution is painted. This solution possesses strong antiseptic, antiparasitic, antipruritic, antiphlogistic, analgistic, anæsthetic and absorption properties. It penetrates deeply into the tissues of the skin not only hastening the absorption of inflammatory products but being itself readily absorbed. Although it possesses these important therapeutical and physiological properties, it is not altogether free from evil effects which may result from its use. In a few cases, especially in children and blondes, the amount of pain and inflammation following its use is so extensive as to forbid its employment except much diluted, or over very limited areas. If applied to the face, scalp or hands it produces some staining, which, although lasting but a few days, is an objection to its use in some cases. There is always danger of the absorption of carbolic acid when this solution is painted over a large area, resulting in constitutional poisoning. This objection to its use should never be lost sight of when this agent is employed.

I was first tempted to use this combination of chloral, iodine and carbolic acid in certain cases of skin diseases, having employed it in my hospital days as an application to the cervix

uteri, and noticing what a decided effect it had in lessening the congestion and thickening of the tissues. The little papillary growths so often found on the cervix were frequently destroyed, after a few applications of this mixture, without any inflammatory reaction. As the solution was also a powerful germicide, besides having such decided action on congested, indurated tissue, it seemed to me just the application to make in all parasitic affections of the skin accompanied by induration and thickening. Acting on these indications I began its use in my dermatological practice with the case just recorded, and have continued its use with the best results in certain classes of cases ever since. Especially has the result of treatment been most satisfactory in ringworm of the scalp. Cases which had resisted other forms of treatment for months began to improve at once, and were practically cured in three or four weeks.

The plan of treatment employed in these cases consisted in extracting the hairs from the diseased area, which was done with ease and without much pain after thoroughly rubbing into the scalp a four per cent. cocaine ointment, then cleansing thoroughly with soap and hot water, after which an application of this solution was painted over the patch extending a little beyond its border. If the area is a large one and especially if the child is young, I advise that no larger area than an inch square be treated at one time. It is not unusual to find that this application is followed by quite a severe dermatitis of the scalp. To relieve this inflammation a Lassar paste is ordered continually applied. Usually in three or four days the inflammatory action has so far subsided that another application can be made. In a large number of cases treated I have found but very few that required more than three or four such applications.

This plan of treatment not only acts well in the non-inflammatory forms of ringworm of the scalp, but especially so in the tinea kerion, the inflammatory condition present being no counter-indication for its use. In ringworm of the body and in tinea versicolor one or two applications of this solution will usually effect a cure. In the treatment of tinea barbae I have perhaps met with the best success in the employment of this agent. The plan of treatment usually employed was as follows: If the disease had lasted but a short time its progress was usually checked by painting over the diseased surface every two or three days a solution of this iodine, chloral and carbolic acid, and in the meanwhile keeping some soothing application continually applied to relieve the subsequent inflam-

mation. In chronic cases and when the disease was extensive it seemed much better to make this application over small areas at a time, thus taking perhaps a week to go over the whole surface, in the meantime keeping the beard cut very close and carefully extracting all hairs having suppuration about their follicles. Before any application is made all crusts are removed by soap and hot water or by poulticing. Every night and morning the patient should bathe the face for half an hour in very hot water, after which all the loose hairs and those with pus about their roots should be removed. A lotion of resorcin, fifteen grains, and bichloride of mercury two grains, to the ounce of rose water should then be applied, after which a small area should be painted over with this solution of carbolic acid, iodine and chloral. At night ammoniated mercury ointment containing fifteen grains of resorcin to the ounce may be kept continually applied.

It is my experience that this strong solution very much hastens recovery, for in cases where it was used on one side of the face only, the other treatment being the same over the whole affected area, recovery was much more rapid on the side to which this agent was applied. After each application the induration becomes less extensive and the disease shows no tendency to spread.

Noticing the marked tendency which this agent seemed to have in preventing the spread of skin diseases and lessening the inflammatory induration, I was tempted to use it in other diseases of the skin than those of a known parasitic nature.

In the superficial paronychia known as "run-around," I found that the disease could be entirely cured by one or two applications. The raised epidermis was first carefully dissected away, and the lesion then lightly painted over with this solution, being particular to get the edges thoroughly impregnated with it. The success derived in checking the suppuration in this variety of paronychia led me to use it in certain forms of skin diseases attended with the production of pus. Good results were obtained in impetigo contagiosa, not only in healing the lesions, but preventing the spread of the disease by carefully removing the crusts, touching lightly the base of each lesion with this solution, and then dusting with aristol or applying a weak solution of ichthyol.

A few impetiginous and ecthymatous lesions were treated in like manner, and almost always with benefit. The good results in these cases, characterized by the formation of pus, was

largely due to the antiseptic property of this solution. In a series of cases of psoriasis I have used it with considerable success. Especially has it been serviceable in cases where the patches have been large and covering a considerable extent of surface. I first tried painting this solution around the edges of the patch, and was gratified to find the area smaller after each application. Afterward I applied it to the whole patch, unless it covered too large an extent of surface, and have usually found the result much more satisfactory than that obtained by any other plan of treatment which I have ever employed. Cases which have resisted other methods of treatment have yielded kindly to this. The method usually employed consisted in first removing the scales by applications of salicylated oil, after which the patch is thoroughly painted over with the solution. The pain, if at all severe, can be controlled by an ointment of cocaine, after which an ointment of one part of the ointment of carbolic acid, two parts of the ointment of tar and five parts of diachylon ointment is to be applied continually for three or four days; then, after carefully cleansing with soap and hot water, another application of the carbolic acid solution is to be made.

A marked improvement is usually noticed after the first treatment. The induration is less marked, the patch less elevated and the borders less distinct. After the second application the improvement still continues, and there will be found little islands of skin where the disease has nearly disappeared. This improvement continues until after a few applications the skin returns to its normal condition, a little redness and pigmentation being all that remains. There is also no tendency for any return of the disease in the same areas. Occasionally some dermatitis is set up, which, however, may be easily controlled by the application for a few days of Lassar's paste. In old, chronic cases of psoriasis, where the patches have lasted for years, the treatment of one patch by this method and other patches on the same body with chrysorobin or preparations of tar will show at once the advantage derived by the plan of treatment which I have just described. Especially well and satisfactory does this plan of treatment act in psoriasis of the scalp. Squamous forms of eczema occurring on limited portions of the body may be treated in a similar manner with splendid results. Cases having lasted for years I have seen cured in a few weeks, and without tendency to return. In all chronic cases of eczema where there is thickening and

induration of the skin, with persistent desquamation and annoying pruritus, cases in which emollient applications are utterly inefficacious, this solution will change the character of the eczema from a chronic to an acute form, a condition not only showing a natural tendency to recovery, but one which responds readily to treatment. The lesions of papulo-squamous syphilis may also be made to disappear very rapidly by the employment of this agent.

Two cases of lupus erythematosus of recent origin have been thoroughly cured by a number of applications of this agent, and now, after several months, show no signs of return. Other cases of lupus erythematosus in which I have used it show marked signs of improvement—much better in result than from the use of pure carbolic acid alone. The cases showing the most marked improvement are those in which applications of tar and diachylon ointment followed the use of this solution.

In several cases of lichen planus, where the disease has not been extensive, I have used this solution with good results. Not only does it allay the itching, but checks the spread of the disease and hastens resolution. My best results in this disease have been in cases where the application of this solution was followed by the ointment of tar, carbolic acid and diachylon.

In molluscum contagiosum I found no trouble in curing the disease in one or two treatments by puncturing each lesion with a platinum wire dipped in this solution. Pure carbolic acid or stick of nitrate of silver, and perhaps several other substances, may do the same, but the process is more painful and followed by more reaction, and the lesions heal less rapidly. After each lesion is punctured, I usually cover it with mercurial plaster, allowing it to remain on several days.

I know of no application which will prove as beneficial in hastening the return of the hair in patches of alopecia areata than this solution. The best results, in the few cases in which I have tried it, were obtained by making the application once in five to seven days. In five cases, four showed the beneficial effects of treatment in from four to six weeks. In these cases no other external treatment was employed. In one case there has been absolutely no result obtained from either this or any other plan of treatment. In another one of this series of cases not only did the hair return after treatment, but the neuralgic pains which were very severe at the site of the alopecia were very much relieved, after each application, for two or three days.

Noticing the power of absorption this solution seemed to possess, I was tempted to use it in a few cases of chloasma. The first case in which I tried it occurred in a young lady of society, living some distance from New York. There were three patches of chloasma on her face, which had existed for several months and were so disfiguring that she worried over it very much. She had been treated without success in a number of different ways, and was willing to be experimented upon provided that any hope of success could be assured her. Three applications of this solution were made in my office a few days apart. Some slight inflammatory action was set up, which was relieved by applications of cold cream. After the third application the skin was stained a dark brown color, which, together with the inflammatory action, made the lesions look very much worse than they did before treatment was begun. I had prepared the patient, however, for this condition, so there were no protestations on her part. The patient was then told to return in a month so that I could see the result. At the end of that time we were both much gratified to find a very marked improvement. There still remained some slight pigmentation, which seemed to me, however, to result more from the application than the original forms of the disease. She was told that the staining would gradually grow less marked in time, and to report again for observation in a few months. She did so after six months, without showing any traces of her former disease. In other cases the result of treatment has not always been so satisfactory, but I am positive that the results obtained have been better than from the use of any other application to these lesions. Of course, as the disease is most frequently the result of some functional or organic derangement of an internal organ, new patches of the disease may make their appearance while the old ones are disappearing under treatment. If no result is obtained after three to five applications it is not advisable to continue with this plan of treatment, as pigmentation of the skin may result from the frequent application of this irritant.

This fact has led me to use it in certain cases of leucoderma with good results. To be of use, however, the solution must be applied every few days and continued for some time. A pigmentation may take place in the skin after a time which is often permanent, thus effecting a cure.

Since erysipelas has been known to be a germ disease, and since this germ—the erysipelas coccus—has been found in large

numbers about the edges of the affected area, dermatologists have been looking for some germicide which will destroy the micro-organism and prevent the spread of the disease without injury to the tissues. This agent, it has seemed to me, would fulfill these indications, so I have used it in a number of cases with benefit. My experience in treating this disease is so limited that I cannot speak with certainty as to its value as compared with other agents, especially ichthyol, but I can say that it has a decided tendency to prevent the spread of the disease. In the few cases in which I have used it the applications were made daily to the margin of the disease and about an inch beyond it, while a lead and opium wash was applied continually to the inflamed area. All of these cases but one did remarkably well, and I could not wish for better results. The one case which terminated fatally was in an old lady where the disease begun on the nose and spread rapidly to the scalp and neck, resisting all efforts to check it.

"The Sensation of Itching," one of the best papers ever read before this Society, by Dr. Bronson, did more to place us on the right track to intelligently treat this symptom, when not the result of a skin lesion, than has ever been done before. In this paper Dr. Bronson states that scratching relieves the itching either by substituting for the pruritus painful or voluptuous sensations, or the active irritation of the skin by this form of counter-irritation, produces better conductivity in the nerves and thus removes one of the principal causes of this unpleasant sensation.

Now, if we can substitute for this scratching some application to the skin, which will produce the same result only more lasting, we will certainly receive the blessings of our patients even though we may not cure them. Such an agent we have in this solution of carbolic acid, iodine and chloral. When the pruritus is limited to small areas it may be applied with perfect safety although there is some counter-indication for its use. Used about the anus and scrotum I have seen some dermatitis set up lasting for a few days, which although quite painful has always resulted in a marked amelioration of the itching, which not only lasted while the inflammation was present, but for some days and weeks afterward. Many other varieties of skin diseases have been treated by this solution, with various degrees of success, and although I do not wish to convey the impression that we have in this remedy a panacea for all diseases to which the skin is heir, I do hope to emphasize that it is a

valuable addition to the list of agents we now possess in treating skin affections.

There are some counter-indications for its use, some cases of skin diseases which would be made worse by the employment of any cauterizing agent no matter if only superficial in its action. In most of the acute inflammatory conditions of the skin I should not recommend its use, especially when the skin is denuded of its epithelium as in cases of acute eczema or acute dermatitis, nor can I recommend its use in the so-called glandular affections of the skin, or in any of the skin diseases covering a large extent of surface.

Remember that we not only have here a powerful agent, one that is capable of setting up severe inflammation of the skin which may be likened to that of a burn, but one that can be absorbed into the circulation, set up constitutional poisoning, and perhaps cause death. Therefore, care should be taken as to the extent of surface to which this application is made, also as to the age of the patient, remembering that the skin of young children is very easily affected by counter-irritation. Never allow your patients to apply this remedy themselves, but take the whole responsibility yourself, thereby insuring that it is done properly and at a right time. The success which I have derived from its use I believe to be entirely due to the personal attention I have given the patients under my care.

There is, perhaps, no branch of medicine which has made greater advancement in pathology and diagnosis than dermatology; but, alas, in what chaos do we find the treatment of many skin affections, especially chronic skin diseases which show no natural tendency toward recovery. When I see how few dermatologists agree upon any plan of treatment, how many patients go from one specialist to another, seeking relief without finding it, I become more and more impressed with the remark which I heard a distinguished dermatologist make to his class when speaking of the treatment of skin diseases. He said:

“Gentlemen, the basis of all treatment for skin diseases is grease. It does not seem to make much difference, in a large number of cases, what kind of grease it is, but be sure, gentlemen, it is grease.” That is just the trouble. We are too apt to use grease, too apt to use bland and soothing applications in skin diseases which demand strong counter-irritation. Never mind if an acute inflammation of the skin is set up; it is easy to control, and by its action on the diseased tissue will fre-

quently, as you can all testify in some forms of chronic eczema, prove most beneficial.

Fox and Taylor strongly advise the use of irritant application in eczema squamosum to stimulate the skin and set up an acute or sub-acute process, which will take the place of the chronic inflammation and yield kindly to subsequent treatment.

Although I am thoroughly convinced that this solution possesses, outside of its counter-irritant action, well-marked curative properties in many of the skin diseases, I have no doubt that a portion of the good results obtained was the direct result of substituting for the disease, to which the solution was applied, an acute inflammation of the skin, a condition not only responding readily to treatment, but one showing a natural tendency toward recovery.

After two years' experience in the use of this therapeutical agent, I believe the following conclusions can be safely drawn :

I. That we have in this combination of chloral, carbolic acid and tincture of iodine, in equal portions, a topical remedy of decided value for the treatment of certain affections of the skin.

II. That the combination of these agents produces better results, has a wider range of usefulness and possesses superior therapeutical advantages than are found in either of the remedies when employed alone.

III. That the physiological properties of this solution, upon which the therapeutical advantages of the remedy depend, are those of an antiseptic, antiparitic, antiparasitic, antiphlogistic, analgesic, anæsthetic, absorbent and counter-irritant nature.

IV. That the solution is a powerful agent, and should not be used indiscriminately or carelessly, as there is danger of producing severe dermatitis and constitutional poisoning.

V. That its chief therapeutical advantages are due to its penetrating action into the tissues of the skin, its rapid destruction of all forms of micro-organisms, and its wonderful power in hastening the absorption of inflammatory products.

VI. That it is, therefore, especially serviceable in parasitic skin affections and in all forms of chronic skin diseases characterized by thickening and induration of the skin, accompanied by scaling and itching.

VII. That it changes the form of some skin diseases, substituting for the original disease an acute dermatitis, which responds readily to treatment.

260 West Fifty-seventh Street, New York.

A CASE OF MULTIPLE SARCOMA.

BY

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Late Superintending Surgeon Northern Pacific Railroad.

ONE of the rarest affections met with is multiple sarcoma in any part of the body, but more especially of the scalp. The case I here present is one of such unusual development that I concluded to have it photographed.



FIG. 1.

These tumors are very vascular and smaller ones rest under the larger and more prominent much like grapes clustering in a heavy bunch. On account of the hair it was impossible to get

a good view of the back of the head where the tumors are just as numerous as shown in the pictures. (See Figs. 1 and 2.) For some time there has been an increased activity in the formation and growth, more particularly and noticeable the encroachment on the face, and the smaller tumors are of a comparative recent development.



FIG. 2.

Microscopical examination shows that the cells are loosely packed in alveoli of greatly varying size. The appearance of the alveoli in certain portions of the section is not unlike the stroma of carcinoma. The walls of the capsules are frequently infiltrated with the cells as are also the normal tissues beyond. It is essentially the "Alveolar Sarcoma" of Billroth.

The patient is a native of Scotland, æt 52 and was married at age of 26 : 5 para. Commenced menstruating at twenty and previous to that time had frequent attacks of epistaxis, but her general health was always good. Her parents were strong, hardy people, but she remembers her maternal grandmother having some tumors on the top of her head and that she died of consumption at fifty. There were thirteen children in her parents' family and none were similarly affected and no death occurred from hereditary diseases. She first noticed a growth beginning when twenty-four years old on the top of her head and had it removed by Professor Simpson, at Edinburgh. No recurrence was observed for seven years, when another reappeared a little to the right of the former site, this also was re-

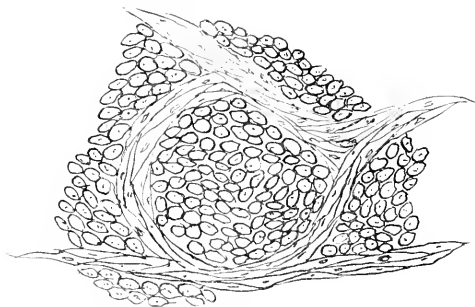


FIG. 3.

moved; shortly thereafter many smaller ones began studding the entire scalp. In 1875 three were removed in Canada, and subsequently, two more at St. Paul. She never experienced any pain during their development. In Canada years ago she had a terrible fall landing on her head, breaking open some of these tumors on the side she struck on.

The pedicles of some of the growths are very slim and can easily be ligated; while others are so broad as to enforce removal with the knife.

Her only surviving child, a son age twenty-five, is developing a similar growth on the centre of the head.

The hereunto annexed drawing, made from microscopic preparations, was kindly prepared by Dr. A. E. Rockey of this City. (See Fig. 3.)

A THIRD CASE OF XERODERMA PIGMENTOSUM IN THE SAME FAMILY.

BY

A. W. BRAYTON, M. D.,

Indianapolis, Ind.

IN the report of the two cases of xeroderma pigmentosum published in the April, 1892, issue of this Journal, I mentioned that an infant sister of the case presented had not yet passed the danger line. This child, born April 20, 1891, is now a victim of the disease.

I first saw her in her sixth month, and with Dr. Guido Bell, of this city, made a careful inspection of the face, using a simple lens in strong daylight. There were at that time, I should judge, between 150 and 200 small white sunken atrophic spots upon the cheeks and brow. At the time we pronounced it a case of xeroderma pigmentosum, but as there was absolutely no prodromal erythema, pigmentation or telangiectases visible, I thought it admissible to keep the little patient under observation until the characteristic lesions of the primary stages were established.

I saw the child again in mid-winter. There was no further progress of the disease. But careful inspection in early March showed an increase in size and number of the white, atrophic, slightly sunken and contracted areas upon the brow, cheeks and backs of hands and wrists. There were also a few brown pigment spots from the size of a pinhead to that of a hemp-seed. By late April the generalized redness of the face and hands was evident, but the closest scrutiny of the skin with the lens showed no abnormality of the vessels. By middle of July the atrophic spots had increased in size until some were a fourth of an inch in diameter. The brown and yellowish pigmentation is now so noticeable as to disfigure the child's face. A careful estimate of the number leads me to think there are upwards of 500 to 800 each, of pigment spots and atrophic areas upon the face, and about 150 of each upon the wrists and backs of hands. Thus far the dorsal surface of the feet shows only a few atrophic patches.

The child is otherwise strong, well-grown and healthy.

It is a matter of interest that there are three healthy male children, free from the disease, between the girl presented in the April issue, and the case here described. It is also worthy

of note that the first lesions of the disease recognized by the eye alone are the atrophic spots and that these are not preceded by erythema. That the apparent growth of the atrophic area should be held in abeyance through the winter months should also be recorded.

The case reported in the April number is in her usual good health. I have removed tumors from her cheeks, ears, eyelids and margin of nose, from time to time. The resulting wounds bleed freely and heal promptly. I see no reason why the girl should not pass into mature life if these soft tumors are scraped out promptly on their appearance. It is not safe to wait for them to dry up and detach themselves spontaneously. The girl has had similar tumors on the cheeks and ears a half inch in diameter, which have fallen off and the base healed without untoward effect. But one upon the right little finger, grew to the size of a large hickory nut. The bone was exposed in removing it the second time. I shall be compelled to remove the finger if it recurs again.

Microscopic sections do not show such a wildness of epithelial growth as is seen in Dr. Pollitzer's section from Dr. Crocker's case. I am greatly indebted to Dr. Pollitzer for the account of the histology of xeroderma in the April issue of this Journal. The annals of pathology probably do not contain a parallel to the histological riot shown in his section.

26 East Ohio Street.

REMOVAL OF A CALCULOUS MASS DEPOSITED ON A PIECE OF ELM BOUGIE.

BY

DUNCAN EVE, A. M., M. D.

Professor of Surgery, University of Tennessee, Medical Department.

MR. L., aged 41, a resident of the western portion of Tennessee, applied to me, February 26, 1892, and stated that for several years he had been suffering from bladder trouble; passing at frequent intervals blood from the urethra, making many and painful efforts at micturition, although laboring under incontinence. He stated also that some two years before consulting me, his family physician had examined him and introduced a bougie and told him that he needed the advice of a surgeon. The patient's condition was extreme, being continually wet with urine, having frequent

spasms at the neck of the bladder and having, shortly before coming to Nashville, passed a gravel about the size of a grain of wheat. So urgent and deplorable were his symptoms that it was decided to attempt to relieve him at the very earliest moment. Accordingly, after twenty-four hours' recumbency, a sound was introduced, which at once came in contact with a calculus near the prostate gland. Two hours later, having prepared for the operation, Dupuytren's bilateral section was made, in the usual way, with the double *lithotome chaché*. Preference being given this method for many reasons and in this case more particularly on account of a very deep perineum.

The mass was seized by forceps, the end of which crumbled under pressure, and removed through a medium sized opening. Upon examination it was noticed to present a distinct nucleus of a soft flat portion of the bark of slippery elm, about three-fourths of an inch in length and an eighth of an inch in width. This foreign substance was outlined by removing particles of the stone.

Upon inquiring the patient informed me that the bougie which his physician had used was made of slippery elm bark. It is therefore clear that a portion of the bougie was broken off and remained in the bladder.

The mass which was removed and which had formed around this foreign body is phosphate of lime, weighing three and a quarter drachms and measuring two and a quarter inches in length and three-quarters of an inch in circumference.

The patient made a quick recovery, never having an unpleasant symptom during the after treatment, which consisted of little else than great cleanliness; antiseptic injections into the bladder; observance of the horizontal position; dilutent drinks and good nourishment. The urine escaped through the perineal opening ten days, when this united the water resumed its natural course.

My patient returned to his home fourteen days after the operation entirely well.

One is apt to think that what is new to him is novel to others and I confess it is the novelty of this case which causes me to present the same. In this I may be mistaken, and yet I have not been able to find a case like it in any work on the subject, and if such has been reported in any of the medical journals I have not been so fortunate as to see it. It is true, however, that my father had, some twenty years ago, a case somewhat similar to this one and which he reported to this Society.

The inquiry would naturally arise in this case, did a stone exist in the bladder of Mr. L., before the introduction of the slippery elm bougie? The physician probably would be able to give some information on this point and the presumption would be that the patient must have had some symptoms of stone, to induce his family physician to introduce this crude instrument. It will, however, be remembered by some of the older members of the profession that Dr. Rezin Thompson, of this state, published a work before the war, in which he advocated the use of slippery elm bougies and pessaries in certain cases, and gave very minute directions as to how they should be made. It is possible that this work may have fallen into the hands of my patient's former doctor.

But, the question recurs as to the prior formation of the stone. And also what effect the presence of this foreign body had, if any, in causing the calcareous particles to cohere? Was there anything in the ligneous substance which would invite the lime deposit? If not, would it not be likely from its mucilaginous property to retain these deposits when once formed and thus facilitate the coalescence? Again, might not the small particles have passed out with the urine but for the presence of this peculiar foreign body?

Did the presence of this substance by causing irritation and inflammation tend to obstruct the flow of urine and by prolonging its retention give the urine when charged with calcareous matter additional time for its precipitation?

PEDICULI CAPITIS AS A CAUSE OF PRURITUS VULVÆ.

BY

G. FRANK LYDSTON, M.D.

Chicago, Ill.

PRURITUS vulvæ, due to the ordinary pediculus capitis, is certainly a very rare condition. A short time since I was consulted by a young girl of fifteen years of age for menstrual difficulty and intense pruritus vulvæ. On examination, I found, much to my surprise, that the hair of the mons veneris and labia was literally alive with pediculi capitis. The hairs were well supplied with the ova of the insect. Rude

scratchings of the parts had developed an eczematous eruption. Aside from the pediculi, there was nothing to explain the pruritus, which disappeared under bi-chloride lotions. No pediculi were to be found in hair of the scalp, strange to say; nor was the child aware of their existence in a situation which, to say the least, is novel in the life habits of the insect in question. Careful examination left no doubt as to the character of the insect.

Society Transactions.

NEW YORK DERMATOLOGICAL SOCIETY.

217TH REGULAR MEETING.

DR. GEORGE H. FOX, *President, in the Chair.*

Cases for Diagnosis.—DR. FOX presented two cases, father and daughter. He said there were three members of the family similarly affected. The trouble was congenital and manifested itself principally in atrophy of the tissue around the finger nails.

On the palms are small red, somewhat elevated lesions, vascular in character. Keratosis of the palms is marked in the case of the father, probably aggravated by his occupation. In the children this feature of the trouble is not seen.

DR. LUSTGARTEN thought the cases represented a form of keratoma palmaris. In children sometimes very little keratosis is present, although the epidermis is not normal. The lesions of the fingers he would consider as secondary, brought about by trauma or the flexion of the fingers.

The heredity of the affection would speak in favor of ichthyosis palmaris or as it has been called, by Unna, keratoma palmaris.

DR. KLOTZ thought the cases would be favorably influenced by pilocarpine.

DR. FOX first thought the cases were similar to the one reported by Brooke as angiokeratoma. In the cases shown to-night, however, there appeared to be no angioma, although there were a few red points upon the palms of the hands, but the cases were quite different in character from those reported in England.

In the youngest child there is no evidence at all of keratoma.

Papilloma of Axilla and Fore-arm.—Presented by DR. GEORGE H. FOX.

Patient age 23, presented a bright pink scaly papular eruption with lesions tending to form striae, of six years' duration, beginning on anterior fold of left axilla. The eruption also extends over palm, centre of wrist and palmar surface of ring finger, being serpiginous in character.

Lower half of the under side of fore-arm presents a stripe of papulo-squamous lesions about the length and breadth of fore-finger.

DR. ALLEN said from the peculiar distribution he would call it a neurotic papilloma, although it did not follow the course of any particular nerve.

Two Cases of Epithelioma.—Presented by Dr. DANIEL LEWIS.

Both the patients were old men and the ulceration was extensive. In neither case was there any involvement of the superficial lymphatics, or any marked cachexia.

DR. ELLIOT had treated one of these cases six weeks ago; he had prescribed fuchsin and under its use the induration about the ulcer of the back had softened down enormously, while the secretion and smell had been arrested to a considerable extent.

DR. ROBINSON would advise a caustic paste in the treatment of these cases.

DR. SHERWELL advised an amputation for the epithelioma of the hand. He had recently kept a man, eighty-five years old, under the influence of an anæsthetic for about an hour without serious result.

DR. LEWIS had considered the advisability of amputation in the patient with epithelioma of the hand, but on account of the danger of secondary hæmorrhage from atheromatous arteries, and as the disease appeared to be a purely local one, spreading only at the borders, he thought it could be healed by local measures.

He objected to the use of caustics on the epithelioma of the back, because of the large surface involved. He had never been willing to treat so large an ulcer with caustics. He regarded it as a far more malignant case than the one on the hand. He said fuchsin had certainly accomplished what Dr. Elliot had claimed for it. He considered the chloride of aniline—a 10 per cent. solution in dilute alcohol—of more service than fuchsin; he would inject about twenty drops of this solution. He had never seen a cure produced by it, nor did he expect to, but the improvement and arrest in the progress of the disease was often marked.

Lupus of the Face.—Presented by DR. ALLEN.

The patient was a man, who for a number of years had had a slowly spreading ulcer in the region of the eye implicating the lids. It had been treated by many physicians some of whom had taken it for lupus, others for epithelioma. He had undergone a thorough treatment with tuberculine, with little or no benefit.

DR. ELLIOT had examined a piece of the diseased tissue from this case and found it to be an epithelioma.

DR. LEWIS said the case was under his care two years ago; he believed it to be a case of lupus until it proved rebellious to treatment directed against that disease. He then removed, by operation, all the diseased tissue possible. It was regarded as cured for some months; then it cropped out again. At the time Koch's lymph came into use the case was treated by this method, as large doses as 75 mg. being given. No reaction at all followed the injections, although they were kept up for six weeks.

DR. ALLEN said at first the case was considered one of epithelioma, but an excised piece was submitted to a competent microscopist, who had reported finding only granulation tissue and tubercle bacilli. The result of the examination led him to regard the case as one of lupus. No indurated

margin had been present, nor anything that would cause him to suspect epithelioma.

Chronic Purpura in a Child.—Presented by DR. SHERWELL.

Clara Berg, 10 years of age. Native of the U.S. Healthy; parents never have been sick. Child was perfectly healthy up to six years of age, had all the exanthemata except small-pox. At the age mentioned had some obscure systemic trouble, diagnosis by physician of Bright's Disease. Very frequent and obstinate attacks of epistaxis developed when this chronic purpura manifested itself. Complaints of slight rheumatic pains.

DR. ELLIOT looked on the case as one of hæmophilia rather than purpura. The latest investigations would tend to show that all the forms of purpura together with scorbutus, were probably infectious in origin.

DR. SHERWELL referred to the rheumatic manifestations which pointed rather to purpura than to hæmophilia.

DR. FORDYCE had lately seen two sisters affected in succession with purpura rheumatica. This observation would support the infectious theory of the disease.

Cutaneous Horn—Presented by DR. ROBINSON.

DR. JACKSON spoke of a case that he had seen with Dr. Abbe. On the back of the hands there were a number of warts and horns, and on the inside of the left forefinger a horn had degenerated into an epithelioma with glandular enlargement in the left axilla.

Dermatitis Neurotica.—Presented by DR. ROBINSON.

Female, aged 17 years, single.

Father died of "dropsy." Mother living and well. Four children living, four dead.

Patient was well until she had scarlatina at 2½ years followed by convulsions, right facial paralysis and left hemiplegia; aphasia nine days. The paralysis improved and the patient regained use of her muscles.

Last November received superficial burn just above wrist on dorsal surface. From that time blebs similar to burn appeared confined to extensor surface of forearm and extending as high as the elbow, each bleb healing in from one to two weeks leaving pigmentation. An erythematous condition of the skin precedes for a few hours the formation of the bulke.

DR. FORDYCE said it was unusual for a tropic skin trouble to appear so long after the central nervous disease. He had observed tropic changes in the skin of the hand and in the nails as the result of an irritative lesion of the ulnar nerve. In one case where the nerve was partially divided by an injury, such changes had come on within a few weeks.

DR. CUTLER thought there was some reason for thinking the eruption a feigned one. It had existed for eight months, during which time it became better and worse.

DR. ELLIOT asked how the eruption could be differentiated from zoster. The lesions appeared in patches like a typical zoster.

DR. ROBINSON spoke of a case of dermatitis neurotica which appeared on the paralyzed half of the face of a woman, one year after a cerebral hæmorrhage. It consisted of vesicles and bulke followed by destruction of tissue and scar formation. Several recurrences of the eruption at short intervals had already taken place when the case came under his observation.

When he saw this case first it looked not unlike a herpes that had been out a few days. The eruption on the back of the wrist, after lasting a few weeks time dried up without leaving scars.

Symmetrical Tumors over the Coccyx and Hips.—Presented by DR. FORDYCE.

The patient, an adult male, said the tumors had existed for several years and had been unattended by any pain or other subjective sensation. An examination reveals three hard nodular tumors, two about the size of a small walnut symmetrically situated over the posterior aspect of the hips; the other over the posterior surface of the coccyx, about half the size of the first. The skin over the growths is thinned and somewhat bluish in color. He believed the tumors to be dermoid cysts, although without excising one and examining it he could not make a positive diagnosis.

DR. LEWIS had operated a case where tumors were in the same locality. They were enchondromata and originated from the fibrous fascia. He believed the tumors in this case were of the same character.

Lupus Erythematosus of the Face.—Presented by DR. FORDYCE, in behalf of Dr. Morrow.

This case has been presented at the previous meeting of the Society as an unusual case of disseminated lupus erythematosus. During the past month a number of new spots had appeared while several of the old ones had partially disappeared. A peculiarity of the case was that the spots would almost disappear and within a few days reappear in the same locality.

Lichen Scrofulosorum.—DR. C. G. CURRIER (by invitation), sent the case to the Society with the following history:

L. B., born in Italy; 12 years old. In April 1889, she recognized "raised spots" thickly diffused over back and more or less elsewhere. From December 1890, both knees recognized as swollen. She entered twice into Roosevelt Hospital, September 1888 and December 1889. Their diagnosis was "chronic plithisis and bronchitis." Mother had eleven children; eight died and three are living.

First seen by me in February, 1891. Then slight apex-infiltration and moist râles. Intelligent and fairly developed. Slight, irregular cough. The synovial sacs of both knees were dilated. Many of the raised grouped papules characteristic of the disease. They were in places in groups, of size of a dollar or larger. Most abundant over back. On the back of thigh and calf some had broken down to narrow, deep necrotic ulcers, quite resistant to treatment. By May 1st, nearly all gone. Yet right lobe was infiltrated and could bear signs of slight catarrh of the smaller bronchi. Then in six months all signs disappeared excepting the scar left from my removal of a bit of skin for microscopical examination.

April, 1892, she came to me and called my attention to recurring lichen manifestation; these are now evident.

In March, 1891, a piece of skin removed from back. On careful examination no tubercle-bacilli could be detected by myself nor by other microscopists.

DR. LUSTGARTEN thought the child had tertiary syphilis. He found a periostitis near the elbow, and the nose seemed thickened. He had seen

several cases of syphilis with an eruption like lichen serofulosorum. He did not consider it a specific affection, but dependent rather on a cachexia accompanying tuberculosis and in rare cases syphilis.

DR. PIFFARD said the case impressed him as one of serofula rather than syphilis, still he did not think the eruption a lichen serofulosorum.

Lupus Vulgaris of the Face.—Presented by DR. ALLEN.

The patient was a girl of about twenty-two years, with three patches of lupus upon the face. She had been treated by various methods. Dr. Allen had employed scarification and presented the patient to show the very marked improvement which had followed a single application of this method.

THE NEW YORK ACADEMY OF MEDICINE.

SECTION ON GENITO-URINARY SURGERY, THURSDAY EVENING, MAY 12, 1892.

DR. E. L. KEYES, *President, in the Chair.*

Photographs of Cases.—DR. R. W. TAYLOR presented a number of photographs of interesting cases. The first was a case of multiple sebaceous tumors of the scrotum. Dr. Taylor said that while a sebaceous tumor of the scrotum was not uncommon, the case is of interest because the growths are multiple and because of their large size.

The next case presented was one of chancre of the lips in a young man who came to the New York Hospital some time ago. While engaged in a brawl his antagonist bit him in the lip, and the wound developed into a hard chancre followed by marked secondary symptoms.

DR. ALEXANDER referred to a case reported at the last meeting of the Section, where a young man had received a chancre of the finger while engaged in a street brawl.

DR. TAYLOR mentioned a case recently reported in Kansas City. A young man had his ear slightly cut; his friend, who was syphilitic, applied a small piece of court-plaster to the wound, first moistening the court-plaster with saliva. As a result, a hard chancre developed.

DR. FORDYCE referred to the case of a boy seen at the throat clinic of the Bellevue out-door department, who had a chancre of the lip. His younger brother afterwards developed a chancre of the tonsil presumably from sucking a piece of candy his brother had given him after having had it in his own mouth.

The next case shown by Dr. Taylor was one of roseola syphilitica, masked by profuse epidermal exfoliation. The case was an anomalous one. When the man came into the wards of Charity Hospital, a diagnosis had been made of either eczema or xeroderma.

The last case presented by Dr. Taylor was that of a man with tertiary syphilis. The syphilide was well marked all over the body, but in the gluteal region there were two large patches which might easily have been taken for psoriasis.

DR. ALEXANDER referred to the case of a child with scabs upon the nose and chin, and a lesion on the fingers. The nail towards the base was very much thinned, almost like parchment; the upper half was very ragged and

could be easily detached. A diagnosis of syphilitic onychia was made; the case resembled the second variety described by Fournier, and was typical in appearance. Within a few weeks, however, the nails improved very much without treatment.

DR. BROWN reported the case of a child two years of age; the patient was a girl and suffered from a greenish discharge from the vagina. Upon examination, the vulva appeared normal; the hymen was not lacerated. A very profuse discharge came from what proved to be the vagina. The discharge was very tenaceous so that it could be picked up with the forceps. The urethra did not appear to be affected. Dr. Brown said he had not yet had an opportunity to examine the discharge for gonococci.

DR. BREWER stated that he has seen a few cases like the one described by Dr. Brown. In such inflammation in young children, there is usually more vaginitis than urethritis.

DR. TAYLOR said that Dr. Brown's case was a very interesting one. The origin of vulvo-vaginitis in children has been a much discussed question. It occurs in epidemic and endemic form; Dr. Brown's case appears to be one of the latter. It is often an important question to decide from a medico-legal standpoint. At the present state of our knowledge, we know that a coccus, identical in all its peculiarities to the gonococcus, is found in non-specific vulvo-vaginitis; the lesion is generally found in the vulva and vagina, and spares the urethra. The vaginal tissues in children are more succulent. If it can be proven that the gonococcus is present in the discharge in children who have not been contaminated by gonorrhœal infection, it does away with a great deal of the weight of Neisser's assertion that the gonococcus is always derived from a gonococcus, a thesis which Dr. Taylor said he doubted very much. This leads to the consideration of another theory which has been advanced, namely, whether we carry these gonococci around with us as we do other micro-organisms, and fan them into a state of activity in licentious combats.

DR. TAYLOR suggested that Dr. Brown should endeavor to find some possible source of infection in the case he had mentioned.

DR. BROWN said he should rather expect to find another case in the same family. The woman who came with the child said that it was in the habit of handling itself a great deal.

DR. TAYLOR said that it is claimed that these children contaminate themselves by the fingers, or else that the disease is transferred from a dirty towel. These are always interesting cases to probe to the bottom. There is sufficient evidence before the medical profession to-day to warrant the belief that many of these cases in which there is profuse discharge with micro-organisms present, identical in all essentials to the gonococci, are the result of uncleanness, etc., and not of gonorrhœal infection.

DR. WILLY MEYER showed a set of steel sounds which he said he had not seen in use in this country. They have a bulbous end, with a short, curved neck. A stilet runs through the sound, which can be drawn out after the instrument has entered the bladder, thus converting it into a catheter. Dr. Meyer stated that he had found them very useful in cases of retention of urine, with chronic enlargement of the prostate, where the elastic catheter will not go through. Dr. Meyer said that these sounds are at present imported, but that he would induce Messrs. Tiemann & Co. to make them here.

DR. KEYES said that he considered the bulbous end a doubtful advantage. The curve was a good one.

Presentation of Specimens.—By DR. SAMUEL ALEXANDER.

Dr. Alexander stated that he regretted that he was not able to present microscopic sections, but that the specimens he had to show were not sufficiently hardened for that purpose.

The first specimen shown was from a patient who had been operated on April 15th last. The man had come into Bellevue Hospital several days before, having been brought there from Long Island by his physician to be operated on for hydrocele. There was a round tumor in the right side of the scrotum, rather soft in front, harder behind. The cord was well defined above, and lost below in the tumor. A hypodermic needle drew off some yellow fluid, looking like dirty yolk of an egg, some broken down detritus and a few epithelial cells of large size. The fluid was distinctly alkaline and did not give any evidence as to the character of the growth. The man gave a rather indefinite history; he knew very little English and spoke a Russian dialect which was difficult to understand. There had been no pain. Two months before he came into the hospital he had been struck on the scrotum, followed by a "black and blue mark" on that side. Then the testicle began to swell, and he had not been able to continue at his work. There was no pain on pressure, no dragging sensation, no enlargement of the glands, no symptoms of a constitutional kind. The man looked well and hearty and seemed strong. Dr. R. W. Taylor was present at the time of the operation. In cutting down on the tumor, the tunica vaginalis was found not to contain any fluid and was apparently normal; the tunica albuginea was enormously thickened and enveloped a cystic mass, the fluid contained in which being of the same kind as had been drawn off by the hypodermic needle. Within the testicle were these fungoid masses (specimens shown). You will notice in the section that the head of the epididymis is much thickened, the body likewise, and the tail still more so. There seems to have been a hæmorrhage just at the right of the head of the epididymis, with thickening and ulceration of the cyst through the tunica albuginea. On the day following the operation the man seemed very well indeed; there was no temperature for two days. On the third day he complained of no pain, but looked rather flushed; temperature 99.5. A physical examination of the chest revealed at this time a pleurisy over the base of the right lung, with roughened breathing and rales. The man died suddenly about 11 o'clock the following morning.

At the autopsy, made the same day, the following condition was found. A tumor was discovered in the abdomen, consisting of a mass of the retro-peritoneal lymphatic nodules; this tumor had the same characteristic structure as that found in the testicle. The latter has been reported by Dr. Dunham as a carcinoma of the testicle, having undergone cystic degeneration. Secondary deposits were also found in the kidney and spleen. There was no enlargement of the cord or inguinal glands.

The second specimen shown by Dr. Alexander was taken from a patient whose history is in brief as follows.—The man was a sailor by occupation. Three months ago he fell on the deck of the ship, striking on the perineum and scrotum. He passed no blood, but the scrotum became swollen. He was treated in a hospital at Vera Cruz and came out in very good condition,

except that he was told that he had a hydrocele. He was operated on at Bellevue Hospital on May 2d. The patient was very much emaciated, and the expiration over the apex on one side was prolonged. The cord was found not to be involved. The tunica albuginea was much thickened. This growth occupied the body of the testicle, with a small cyst just below it. The growth is a round-celled sarcoma. The patient, since the removal of the tumor, is up, and apparently very much benefited by the operation. He has a good appetite and is in all respects well.

DR. BROWN inquired whether the first patient referred to had any marked febrile symptoms on the day of his death, and what the apparent cause of death was.

DR. ALEXANDER replied that he died at 11 o'clock in the morning. The last temperature, taken at 9 A.M. was 100.5. There was no rise immediately before he died. As to the cause of death, the man seemed to give out completely. There was some pulmonary oedema. He began to look anxious, his respiration was very rapid and the pulse was very feeble; this continued progressively until he died.

DR. KEYES inquired whether the man showed no cachexia when he came into the hospital?

DR. ALEXANDER replied that there was not the slightest cachexia. His physician said that he had not lost anything at all. This was one of the peculiarities in connection with the case.

Pus in the Urine: How to Discover its Source.¹ Continuation of Discussion from March Meeting.—By DR. CHARLES HEITZMANN.

DR. KEYES stated that when he spoke on the subject of pus in the urine at the last meeting of the Section, he only intended to give the gross and general characteristics of the pus, and some every-day methods by which the more common distinctions might be made.

DR. BREWER inquired whether the prostatic epithelium was present in the urine in a simple prostatic urethritis?

DR. HEITZMANN replied that it was not. That the cell is in the body of the prostate itself and is voided through the prostatic ducts.

DR. MEYER stated that finding these sarcomatous corpuscles in the urine, with perhaps other elements of the kidney, was very interesting from a scientific standpoint, but he did not see where the benefit to the clinician came in. How will he be able to tell in which kidney the sarcoma is situated as long as it has not perforated into the kidney pelvis?

DR. AGRAMONTE inquired whether a man could not have prostatitis from a simple urethritis after the age of forty—or whether inflammation after that age meant hypertrophy?

DR. HEITZMANN stated that in reply to Dr. Meyer he would quote the following case: A lady in Orange, N. J., complained of pain in the location of the right kidney for a number of years. Her physician suspected an abscess. Quite recently a gush of pus came through the urine. At this time the urine was examined by Dr. Heitzmann and found to contain sarcomatous corpuscles. Her physician knew well enough that the trouble was located in the right kidney. It was a suppurating sarcoma. In order to tell which kidney is affected the ureter might be catheterized.

¹ See Sept., 1892, issue of this Journal.

DR. MEYER said that as soon as the growth communicates with the pelvis of the kidney, he saw how the sarcoma corpuscles could be found in the urine, but then we should also have hemorrhage. Before perforation takes place, however, he did not see how the corpuscles could travel down the uriniferous ducts and appear in the urine. He considered it impossible.

DR. HEITZMANN said that sarcoma can only be diagnosed after particles of the tumor are detached through ulceration and then hemorrhage is invariably present. There can be no detachment of sarcomatous particles without hemorrhage. If the growth is situated in the pyramids, the debris can find its way through the calices to the pelvis and thus into the urine. In reply to Dr. Agramonte's question Dr. Heitzmann said that while prostatitis is possible after the age of forty, it is much more likely to be a hypertrophy.

DR. TAYLOR stated that he did not think the elephantine spermatozoa heads portrayed by Dr. Heitzmann were pathognomonic of, or even common in spermato-cystitis.

Selections.

Treatment of Alopecia Areata.—The treatment of alopecia areata is the object of interesting researches. Dr. Moty treats such cases by subcutaneous injections of bichloride of mercury. He employs for this purpose a solution containing a decigram of sublimate in forty grams of distilled water—that is to say a solution of sublimate 1—400. In little patches he makes one injection, two in medium sized plaques and four to five in large ones. He repeats them every four days and at the end of the fourth or fifth series of injections considered them cured. After a few minutes the injection occasions a dermic congestion which increases in a circular manner to the extent of five or six centimeters around the point of injection. Each injection consists of five or six drops of fluid. Dr. Barthélemy had used Dr. Moty's treatment and claims to have obtained good results.

Syphilitic Reinfection. DR. PAULY (*Soc. des Scs. Méd. de Lyon*).

The writer presented a patient who gave a history of having had a chancre in 1877, followed by alopecia and mucous patches. He was treated for six weeks with mercurials, and for eight years showed no signs of the disease.

Now there are well-marked secondary signs and two cicatrices in the left cheek, which followed indurated nodules. These, it is thought, may have been the seat of primary infection, as one is still indurated.

[The necessary data are not given respecting the original disease, eight years ago, to make out the case of undoubted reinfection.—Rep.]

C. W. ALLEN.

Icterus in Secondary Syphilis. DR. CHAPOTOT (*Journ. des Mal. Cut.*, June, 1892).

The writer reports three cases of icterus appearing in the eruptive period of syphilis, and believes the condition to be one of the manifestations of the disease. In support of the view that the icterus is not simply a coincidence, is the fact of its evolution along with the secondary manifestations and the absence of all other causes. The author thinks we are too much inclined to divide the evolution of syphilis into two distinct periods—that of superficial localization and that of deep localization, while in reality, at the time when the syphilitic poison is suddenly liberated into the entire economy, visceral manifestations should be more frequent than they are generally admitted to be. If they pass unperceived, it is because they have not been carefully enough sought for.

In the same journal we find reference to a *note on precocious syphilitic icterus*, by Dr. Salomone, who says that the icterus of the secondary period of syphilis should be studied, because it is an index of the feeble resistance of the liver to syphilitic virus, and of its predisposition to more severe late lesions in the tertiary period. The antecedent individual predispositions of the patient contribute to the production of this phenomenon: alcoholism, malaria, gastro-duodenal catarrh, etc. The icterus may appear at the same time with the eruption and generalized adenopathy, or independently of these manifestations. The gastro-intestinal disturbances are very slight. The fever ranges between 38 degrees and 38.5 degrees C. In the more severe forms the gastro-intestinal troubles are much more marked. The liver is large, there is a little ascites, diarrhoea is frequent and profuse, and albuminuria is not rare. The duration of the affection is proportionate to its intensity, but recurrences are at times observed which can lead to diffuse interstitial hepatitis. The coincidence with symptoms of secondary syphilis, the feeble participation of the stomach and intestines, if indeed they participate at all, the absence of lithiasis, marked general prostration and the short duration of the icterus, are the diagnostic elements of the diagnosis. Treatment, aside from specific medication, comprises purgatives, antiseptic intestinal washes and especially mercurial frictions.

[The reporter has observed several instances of this condition, and has, as a rule, attributed the icterus to a retention of bile—following a direct effect of the syphilitic virus upon the mucous membrane of the biliary ducts, just as the effects of the poison are seen upon the cutaneous surface. In one severe instance, however, the icterus coincided with pytalism produced by the mercury administered, and, as the stomach and bowels were much disturbed, the question arose whether the treatment and not the disease had here been at fault.]

C. W. ALLEN.

Quick Therapeutic Test for Syphilis. DR. JULLIEN (*Concours Médical*).

The writer says that in certain tumors of doubtful diagnosis a test treatment which rapidly shows whether the neoplasm is of syphilitic origin, consists in the injections of calomel by the Scarenzio Smirinoff method. Ten centigrams of calomel suspended in one gram of liquid petro-vaseline, is employed, and the injection made into the muscles of the buttock under antiseptic precautions. A number of observations are cited from which the conclusions are drawn:

1. That the therapeutic diagnosis is clearly decided in eight days by intra-muscular injection of calomel.

2. In case of non-success, this mode of treatment offers no obstacle to the subsequent operation, and in no sense diminishes the chances of its success.

Treatment by Mercurial Injections. DR. BROUSSE (*Gaz. heb. des Sci. Méd. de Montpellier. Ann. de Derm. et de Syph.*, May, 1892).

After a review of the whole question of mercurial injections in syphilis, the writer specially recommends the following preparation :

Hydrarg. purif.,	gram 20.
Lanolin,	" 5.
Vaseline (liquid)	" 35.

The mercury is rubbed up with lanoline in a slightly heated mortar, and the liquid vaseline slowly added. It is then placed in a large flask, and is to be shaken at the moment of injection. A tenth of a Pravaz syringe contains five centigrams of metallic mercury, and is the dose to be injected each time. It is regarded as preferable to Neisser's gray oil ; is easily prepared and easily injected. At first the injections are made every ten days, and later every fifteen. The method is especially indicated in strong subjects, where it is desired to cause speedy disappearance of lesions, and where, for any reason, the subject would be likely to neglect treatment. Wherever injections are indicated, the insoluble preparations are given first choice, and the soluble salts are only to be used when there is a contra indication to the use of the former, either from some general state of the patient, such as pregnancy, albuminuria, cachexia, or because of the bad condition of the teeth.

C. W. ALLEN.

Late Ocular Manifestations of Syphilis. DR. ABADIE (*Annal. de Derm. et de Syph.*, May, 1892).

The writer has studied the late affections of the eye, coming on sometimes from fifteen to thirty years after birth, in individuals who have had no primary sore, and plainly revealing the hereditary nature of the affection. The author refers especially to the parenchymatous keratitis so well described by Hutchinson, and differentiated by him from all other forms of keratitis. Here the cornea changes its appearance, becomes soft, dull and opaque, while a more or less bright injection surrounds it as a reddened circle. In the condition to which the author now calls attention there are no external appearances, by which the diagnosis can be made, but an examination by a physician having experience with the ophthalmoscope is required. The cases usually pass under the designation of amblyopia from unknown cause, until the examination shows characteristic lesions. These consist in whitish spots, with pigmentary accumulation around their borders. They are sometimes discrete or isolated, of small dimension, but at times forming large areas and giving a speckled appearance to the whole fundus of the eye (disseminated choroiditis).

This chorio-retinitis (for the retina always partakes in the process) has a slow evolution and gives rise to no inflammatory reaction. As to treatment, local, sub-conjunctival injections of corrosive sublimate (1 to 1000 solution) are recommended as superior to general treatment.

Cocaine is first applied, and then one drop of the solution is injected

beneath the conjunctiva by means of a Pravaz syringe and a platinum needle, which is passed through a flame just before being inserted. These injections are repeated every second day. C. W. ALLEN.

Psorospermiosis Cutanea Vegetans. SCHWIMMER (*Ergänzungshefte zum Arch. f. Dermat. u. Syph.* 1892, 1 Heft).

The patient, female, age 40, was seen after the disease had been in existence for several months. The portions of the body especially affected were the neck and the genital region, the axillæ, abdomen and back; in lesser degrees the flexures of the joints, the ears and temporal regions were implicated. The clinical symptoms consisted of prominent elevations, millet seed to a lentil in size, dark in color, or sepia brown or violaceous, which occasionally discrete were most often arranged in groups or crowded rows. The individual lesions, though prominent, were flattened and were horny in appearance and fatty in feel. The patches gradually faded and into the normal skin in the form of smaller analogous lesions. The skin on the more affected surfaces was rough, here and there infiltrated and pigmented.

At first, there were no symptoms of systemic disease, but only itching and a feeling of tension in the skin was complained of. She remained three months under treatment, but no benefit was obtained, but some relief from the pruritus was experienced from tar and bichloride of mercury baths used alternately. No improvement being observed, the woman became mentally depressed, lost appetite, etc., then left the hospital and at end of two months was reported to have died. In sections of the skin the psorosperm bodies were found. GEORGE T. ELLIOT.

The Present Stand of the Psorospermiosis Question, etc. NEISSER (*Ergänzungshefte zum Arch. f. Dermat. u. Syph.*, 1892, 1 Heft).

Neisser states at the very start that all that can be conceded from our present methods of investigation is the *possibility* of parasitic psorosperm inclusion, but though the suspicion that unicellular parasitic bodies are present may be entertained, yet there is an absolute want of proof that they are really parasites and not simply abnormal and pathological cell formations.

Notwithstanding, however, this primary statement, he yet reports the case of a man who had a small growth on the penis, which when excised showed under the microscope the "psorosperm" and he considers the process to be therefore a psorospermiosis, especially since Pospelov reported a precisely similar case as a "coccidiosis" penis.

Neisser says on the other hand that the cases reported by Darier and others as psorospermiosis follicularis, etc., are open to discussion and that it is a question whether they should be regarded as inherited keratoses or parasitic psorospermioses.

He is more inclined to consider the psorosperm as etiologically connected with Paget's disease, on account of (1) the peculiar clinical picture of the disease, its mode of extension, its difficult and well-nigh impossible cure; (2) the constant presence of coccidia or figures coccidiennes (Besnier). Still, he grants that proof is wanting to establish the fact that these bodies are really parasites, and not abnormally included epithelia in other epithelial cells. Furthermore, the constant localization of the process on the female breast is peculiar and difficult of comprehension under the circumstances—

there having been only a few cases recorded as occurring in men and in other localities. It is also almost the rule to see Paget's disease followed by carcinoma of the breast, and he says that if the coccidia are really the cause of the cutaneous changes, then it should be expected that they would likewise be the cause of the carcinoma. Yet, Darier and Wickham make no mention of the presence of the coccidia in the metastases, though they state that they found them in the deeper prolongations of the epithelium of the skin. Neisser did not find any coccidia in the lymphatic glands of carcinoma. Owing to the constancy of cancer developing consecutively to a Paget's disease, he cannot, however, believe that it can be independent of the psorosperms causing the cutaneous process, and for that reason would reject the suggestion that the cancer is only a secondary outcome of the cutaneous affection, which latter alone is caused directly by the coccidia.

Neisser furnishes, on his own part, absolutely no more proof for his own belief that molluscum contagiosum is produced by psorosperms, than has been allowed by him to other observers in regard to psorospermiosis follicularis and Paget's disease. He claims that he never claimed that he had proof, and yet, without an iota of proof, he retains his belief and considers his view of the matter as the best one advanced, because it agrees with the facts that molluscum is contagious and inoculable, and because it explains the peculiar and unique pathological process of a benign epithelial tumor formation without participation of the connective tissue—a process of cell degeneration which is unique, and which, accompanied by the formation of a membrane at the periphery of the cell, has not its parallel.

(If we sum up the "Present Condition of the Theory of Psorospermiosis," we must confess that it would appear to be in articulo mortis, to judge by the paucity of support obtained for it, as shown by Neisser's paper. No proof whatever has yet been brought forward that the bodies seen in the diseases mentioned are coccidia, but there is only the continued reiteration that because they resemble psorosperms, they must, therefore, be psorosperms, and nothing else. From the literature on the subject so far in existence, we cannot but applaud Brocq's conclusion, that the conception of the theory of psorospermiosis will hereafter possess, in all probability, only an historic interest.)

GEO. T. ELLIOT.

Orchitis as a Complication of La Grippe. DR. E. ZAMPATTI. (*Gazzetta degli Ospitali*, No. 73, 1890.)

Three cases of severe orchitis are reported in patients suffering from *la grippe*. In one instance an abscess resulted, in the remaining two resolution took place.

Correspondence.

To the Editor of the JOURNAL OF CUTANEOUS AND GENITO-URINARY DISEASES.

DEAR SIR:

In a recent article by Dr. Geo. T. Elliot on "The Treatment of Paget's Disease with Fuchsian" in your Journal of July, 1892, I find the author, doubtless through inadvertence or want of knowledge of the facts, has omitted my name as one of the earlier observers of the disease. I had the

honor of presenting the first case (shown as such), in this country, at a meeting of the New York Dermatological Society in January, 1883, which will be found reported with illustration, under Society's Proceedings in March number of the *Journal of Cutaneous and Venereal Diseases* of that year.

Another case was referred to on same evening, which had been diagnosed as Paget's Disease in 1881, by myself, and others of the Dermatological Society, notably Dr. Bulkley who saw the case with me in the Summer of 1882.

That case I had often referred to at the Society Meetings, and had frequently requested Members to visit with me at her house, as, owing to her social position and infirmities, she was not able to be brought as a clinical case to meetings. I was insistent at the time, on Dr. Bulkley's visit, as I, both he and myself, at the International Congress, held at London the year previous, had had the advantage of seeing two, or three cases, presented at the Dermatological Section, by Morris, Thin, and others.

I wrote, also, a paper on the subject which was published in the *American Journal of the Medical Sciences*, January, 1884, giving history as well of a novel surgical procedure I had taken, for the relief of one of the cases.

Dr. Duhring's cases, it is true, were published in the same Journal, in July, 1883, but mine had been made public in other ways, long before that time.

S. SHERWELL.

33 Schermerhorn Street, Brooklyn.

Books and Pamphlets Received.

Stricture of the Rectum : A Study of One Hundred and Thirty-eight Cases.

Second edition, enlarged, by Charles B. Kelsey, M.D.

Diseases of the Urinary Apparatus : Phlegmasie Affections, by John W. S. Gouley, M.D. New York : D. Appleton & Co., 1892.

Traitement des Maladies de la Peau avec un abrégé de la symptomatologie, du diagnostic et de l'étiologie des Dermatoses, par le Dr. L. Brocq, Médecin des hôpitaux de Paris. Deuxième Edition corrigée et augmentée. Paris : Octave Doin, Éditeur.

The History of Circumcision from the Earliest Times to the Present ; Moral and Physical Reasons for its Performance, with a History of Eunuchism, Hermaphroditism, etc., and of the Different Operations Practiced upon the Prepuce, by P. C. Remondino, M.D. Pp. 346, illustrated. Philadelphia and London : The F. A. Davis Co.

Syphilis in Ancient and Prehistoric Times. By Dr. F. Buret. Translated by A. H. Ohmann Dumesnil, M. D. Philadelphia and London : The F. A. Davis Co.

Névrodermite aiguë diffuse chez une malade atteinte de plaques de névrodermite circonscrite chronique de la paume des mains, par L. Brocq. (Extrait des *Annales de Dermatologie et de Syphilographie*, 25 Mai, 1891.)

Notes pour servir à l'histoire des névrodermites. Du lichen circumscriptus des anciens auteurs, ou lichen simplex chronique de M. Le Dr. E. Vidal,

- par MM. L. Brocq et L. Jacquet. (Extrait des *Annales de Dermatologie et de Syphilographie*, Février et Mars, 1891.)
- Note sur un cas de Lichen de Wilson chez une Nègresse, par MM. Georges Thibierge et E. Leredde. (Extrait des *Annales de Dermatologie et de Syphilographie*, Nov., 1891.)
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VULVO-VAGINITIS IN CHILDREN.

BY

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RECENTLY a number of infants were brought to the Children's Hospital, suffering from vulvo-vaginitis, acute in type, chronic in course and exhibiting on microscopic examination of the discharge abundant gonococci. The etiology of most of these cases was exceeding obscure. In some it seemed well nigh impossible that the children could have acquired the disease by contagion.

Not only did the micro-organisms correspond in grouping, size and appearance to the gonococci, but reaction to coloring agents was the same. On being stained with aniline dyes, placed in Gram's solution and then decolorized in alcohol they disappeared, leaving still visible a number of other micro-organisms, particularly long and short bacilli.

The question at once suggested itself, and this in medico-legal cases is one of supremest importance, as to whether these micro-organisms, which were in all physical characteristics identical with the gonococcus, were in reality different in their pathogenic properties.

Whether or not we are able, *under all circumstances*, to decide that a discharge from the genito-urinary mucous membrane is gonorrhœal in its nature from the fact that micro-organisms offering the physical attributes of the gonococci are discovered, must be considered still *sub judice*. Lustgarten and

Mannaberg claim that there is found in the healthy urethra a diplococcus which can only be differentiated from the gonococcus by means of cultures. In this opinion Bokai, Eklund and Bockhart coincide.

Bumm describes three kinds of diplococci obtained from the healthy urethra which he states can only be distinguished from gonococci by culture experiments. Vibert and Bordas examined six children suffering from traumatic vulvitis. In all they found diplococci, which in form, dimension, grouping and distribution were identical with the gonococci, coinciding with the latter organism even in the method of staining. Although these authors endeavored to exclude the possibility of gonorrhoeal contagion there is not sufficient evidence offered in their original paper to show that the inflammation was non-specific in its origin.

The statement on the part of a bacteriologist so well known as Bumm, for instance, to the effect that in the healthy urethra a diplococcus offering all the physical attributes of the gonococcus is found, would at first glance seem to invalidate the diagnostic significance of the gonococcus. The researches of Petit and Wassermann, however, show that this non-specific coccus is, to say the least, exceedingly rare. When found it is never present in great numbers, it is not associated with acute urethritis. Hence in the adult, a free purulent flow, microscopic examination of which shows cocci offering all the physical attributes of the gonococci, can for all practical purposes be accepted as gonorrhoeal in its nature. That the presence of the gonococcus is equally to be relied on in determining the specific nature of vulvo-vaginitis in children is often denied. Indeed many writers in place of accepting these micro-organisms as proof that the inflammation is gonorrhoeal in nature hold that in these cases there is a coccus utterly differing in its pathogenic properties from the gonococcus, yet identical with it in appearance and reaction. From which it is argued that the presence of the gonococcus can no longer be considered pathognomonic of venereal disease.

To determine whether or not the micro-organism found in the vulvo-vaginitis of young children was capable of causing in the adult the same train of symptoms as is excited by inoculation of the gonococcus, I selected one case in which it was absolutely impossible to find the slightest history of contagion. The mother of the child was suffering from a slight leucorrhœa which she stated had lasted for six years and had not been sub-

ject to any exacerbations. Cover-glass preparations of her thin mucous discharge showed no gonococci. I could not examine the father but there was in his case no given history of gonorrhœa. The child was but five months old and had practically never been away from the mother's side. It was brought to me with a swollen vulva, superficial lesions of the inner surface of the labia majora and labia minora and a profuse purulent discharge which could be milked from the vagina by passing the finger up the rectum. There was also a drop of pus from the urethra. Cover-glass preparations of this discharge showed typical gonococci fairly numerous. Staining reactions were characteristic of this microbe.

The child was treated for two weeks before I succeeded in discovering a person who would submit to inoculation. I then found a man who had suffered from gonorrhœa some three years previously and from whose urethra there was no discharge whatever, and in whose urine neither pus nor shreds could be detected. Dr. Bloodgood, resident at the Children's Hospital, then carried into this man's urethra, by means of a probe inserted to the depth of three-fourths of an inch, a small quantity of the vaginal secretion from the child. At this time, under treatment, the secretion had been reduced to a very small quantity and cover-glass preparations failed to show the presence of gonococci. Upon the fourth day the inoculated patient complained of constant itching and tingling of the urethra. On the fifth day there was a whitish discharge. In a few days this became profuse, yellow, blood-stained. Microscopic examination of the cover-glass preparations on the tenth day showed large numbers of gonococci. In the third week of the attack the patient suffered from a violent attack of posterior urethritis. One testicle subsequently became inflamed and he is not yet cured of his running, though the experiment was made some five months ago.

It is proper to state that this patient was not kept constantly under observation for the period either directly preceding or directly following the inoculation experiment. I sent him to a hospital, but he eloped on the second day after inoculation and did not turn up at my office until ten days later. He was given to understand that the intention of the experiment was to show that he would acquire no disease, though, of course, told that he might get an attack of gonorrhœa and compensated on this basis. He absolutely denied having had relation with women after inoculation or for several weeks before though he

had no reason to suppose that this would have any bearing upon what we were trying. I am inclined to accept his statements as true because he had no possible object in lying. The subsequent severe course of his case was due to heavy drinking and to sexual indulgence practiced on two occasions, both of which he admitted without hesitation.

Here then is an adult suffering from a severe attack of gonorrhœa and one of its commonest complications, excited by introduction into the urethra of the discharge from a case of vulvovaginitis, acquired in an entirely non-venereal manner, apparently originating *de novo*. Accepting this case, the proof is afforded that the micro-organisms of vulvo-vaginitis and gonorrhœa are alike both in physical and pathogenic attributes, that they are not merely similar but are the same.

Although the source of contagion is obscure, often impossible to discover, a careful and patient inquiry should be instituted. Thus Aubert¹ in one case examined both father and mother without finding the slightest sign of disease. The father was then made to pass his water into a glass when shreds were found which on being strained and placed beneath the microscope were found to contain gonococci. It must be conceded that the chain of evidence in this case is not absolutely complete, the father representing merely the possible and not the positive source of contagion.

Ollivier² believes that the contagion can be brought about from the common bath; from the clothes; or from articles of dressing. He treated two cases which did not react well to his remedies for three weeks, at which time more infants were admitted to his wards. These were infected without exception, making fifteen cases in all.

There can be little doubt but that chronic gonorrhœal inflammation of the parturient canal of the mother is the commonest source of infection, particularly when the disease occurs shortly after birth.

Snard³ of twelve cases admitted to the hospital found one suffering from a vulvo-vaginitis. These cases were treated for various conditions by baths. In a few days three were infected; two by vulvo-vaginitis and one by purulent ophthalmia. Finally all twelve cases were infected. At a later date he admitted fourteen cases, one of which was infected. All

¹ Lyon Medical, 16 aout, 1891.

² Bulletin Académie de Méd., Paris, 1888. 2, 8, XX, 561.

³ Rev. Mens. d'Mal. de l'Enfance. Paris, 1888, VI, 265.

were put in the same bath. Seven days later three developed the disease, and finally, all but one suffered from a similar form of inflammation though every precaution was taken to guard against it. His theory in regard to the etiology is that the microbes of the disease are found in the air and develops in those who are predisposed to it.

Späth¹ in twenty-one cases found the gonococcus in fourteen. Of these fourteen cases eleven of the mothers were found to be suffering from chronic gonorrhœa.

Amacis enters into an ingenious argument upon the acquirement of vulvo-vaginitis and purulent ophthalmia from infected mothers. Thus he states that if 200 gonorrhœal women gave birth to 100 boys and 100 girls the chances are that three girls will be infected with vulvo-vaginitis, while the chances of purulent ophthalmia are equal in the two sexes; this he explains on the ground that in 100 cases ninety-seven are vertex and three are breech presentations. After birth the chances of the disease involving the eye or the vagina are about the same.

That the cause of purulent ophthalmia and vulvo-vaginitis is identical is also shown by Tichendorf who observed in at least one case, ophthalmia due to contagion from the bed covering which had been used by a child suffering from vulvo-vaginitis. De Schweinitz² observed, a child æt 5½ years suffering from a long standing vaginitis who subsequently developed acute purulent ophthalmia as a result of infection from the vaginal discharge. It is of interest to note that in this case pus microbes but no gonococci were found in the eye discharge.

Frankel³ after an extensive investigation into the etiology and course of vulvo-vaginitis states that in most of these cases there is a micro-organism found identical with the gonococcus of Neisser; and that moreover if this micro-organism comes to contact with the eye it produces a condition precisely similar to gonorrhœal ophthalmia. In some of the cases other bacteria were found all holding the same relation to the cells as Neisser's gonococcus. In regard to the source of infection he believes that some of the cases acquired the disease from purulent ophthalmia.

Vogel⁴ believes that in very young children vulvo-vaginitis

¹ Munch. Med. Wochenschrift, 1889, XXXVI, 371.

² University Medical Magazine, Vol. IV., No. 1.

³ Virchow's Archives. Band 99.

⁴ Handbuch der Kinderkrank.

is generally gonorrhœal. Wissenberg¹ states that when the disease is observed before the fifth year it is either gonorrhœal or syphilitic in nature.

Walker, looking at the subject from a medico-legal standpoint, found as the result of examination of twelve cases of supposed rape that only one was suffering from true gonorrhœal infection.

Pott² believes that vulvo-vaginitis in young children is usually due to infection from the mother since examination of the latter has shown that in nearly every case where the child was suffering from this form of disease the mother exhibits leucorrhœa. Out of forty-four cases he observed, six were due to congenital syphilis.

Windmark³ found gonococci in every one of eight cases he had an opportunity of examining. Two of these cases also suffered from purulent ophthalmia. In every one there was a history of either direct or indirect infection.

Singer reports the case of a pregnant mother suffering from gonorrhœal infection, who gave birth to a seven months' child which suffered from purulent ophthalmia, while at the same time the elder child, aged $7\frac{1}{2}$ years, developed a vulvo-vaginitis which was complicated by severe peritonitis which threatened to terminate fatally. After three weeks the child recovered.

Wilander reports the case of a child aged 5 years who died as the result of gonorrhœal peritonitis. He states that in young girls the remains of pelvic peritonitis and cellulitis are frequently found due in nearly all cases to gonorrhœal infection in infancy or childhood.

Pott⁴ out of 481 female children brought to him observed eighty-six obstinate cases of vulvo-vaginitis. Most of these cases occurred at or before the fifth year. He ascribes the disease to malnutrition, acute febrile diseases, mechanical injuries, masturbation, seat-worms, and gonorrhœal infection. All the severe cases he believes can be justly attributed to gonorrhœal infection and in institutions or hospitals are prone to become epidemic. Direct infection he holds is exceedingly rare, having observed this in but three cases. The disease is generally carried by indirect infection.

¹ Allgemeine Med. Zeit., 1883, p. 831.

² Jahrbücher für Kinder heilkunde 19, 71.

³ Archiv für Kinderheilkunde, 1885-86, VII, 1.

⁴ Verhand. der Deutsche. Gesellschaft f. Gynecologie, 1888-2:251.

Even though the mother be suffering from acute or chronic gonorrhoea at the time of the birth of the child the latter generally escapes, since at birth the labia are thick and are generally adherent to each other, thus protecting the mucous surfaces, very much as the urethra of male children is protected by the phimosis which is nearly always present.

According to Prochownik's statistics, sixteen of twenty cases of vulvo-vaginitis examined showed the gonococcus and in eleven infections could be traced directly to the mother.

Currier ¹ states that there is but a single case on record in which the vulvo-vaginitis of an infant extended to the ovaries and tubes. He advances the theory, however, that many of the cases suffering from undeveloped uteri or from sterility really owe their defects to an outbreak of vulvo-vaginitis occurring in early life.

Dusch ² found gonococci in every one of nineteen cases examined. Eleven cases developed in the wards of the hospital, attacking those who were suffering from scarlet fever or its complications. In some of the cases treated in the Out Patient Department infection from the parents could be traced.

Fluge holds that the micro-organism observed in the vulvo-vaginitis of children is the *micrococcus flavus*. He announces as the result of a study of the subject that there is in young children a virulent vulvo-vaginitis; that it is highly infectious; that it especially attacks children suffering from scarlet fever; and that its presence in hospitals must be followed by isolation of the cases and especial attention to the discharges.

Cséri ³ states that the causes of vulvo-vaginitis in children are mechanical irritation, uncleanness, infectious disease and infection by gonococci. As the result of a great many cover-glass preparations, he found that micro-organisms were present in great variety and numbers, but in many cases the gonococcus could be clearly defined. Seven of his cases developed purulent ophthalmia.

As a conclusion to his careful study of the subject he states that the secretion of vulvo-vaginitis contains a micro-organism similar to Neisser's gonococcus, and that this secretion is exceedingly contagious, is rapidly conveyed to the eyes and is very rebellious to treatment.

¹ Medical News, 1889, LV, 3-7.

² Internationale klinische Rundschau, Wien., II, 617.

³ Wien. Med. Wochenschr, 1885, XXXV, 703.

Comby ² states that he has seen 150 cases of vulvo-vaginitis in children. Among the less frequent causes he notes onanism, seat-worms, deflorative eruptive fevers, typhoid, eczema, impetigo and herpes. The most frequent cause is contagion usually carried by articles of clothing, by bed linen or by the bath. He has frequently noted that an infected mother would give birth to a child who would shortly suffer from purulent ophthalmia, while at the same time, or some days or weeks later an elder child would develop an acute vulvo-vaginitis.

Of the nine cases that I have seen, but one could be traced to what may be called direct contagion. This child was five years old. She was brought to me with a profuse purulent discharge from the vagina; with a light bruising and excoriation about the labia majora and complaining bitterly of pain during urination. She suffered from stomach-ache; had fever and was so ill that she was confined to bed. Her parents and a brother, between six and seven years old, were apparently healthy. For upwards of a week the child continued to assert that she knew of no cause for the local trouble. Finally she stated that a boy had during her mother's absence abused her. The boy was brought to me. He was thirteen years of age. On examination he was suspiciously clean about the genitalia and absolutely denied ever having suffered from a running from his penis. On milking the urethra from the bulb forward two or three drops of creamy pus were discharged. Three days later the younger brother of the little girl was brought to me with purulent gonorrhoeal discharge. The children slept together. The pus from all these cases contained gonococci.

Of the remaining eight cases in one there was a history of gonorrhoea on the part of the mother some years before followed by leucorrhoea which had never been cured. The remaining cases absolutely denied the possibility of contagion. In but five of these cases did I make careful microscopic examinations. In all gonococci were found. In addition to these nine I have seen a number of cases of a mild vulvitis characterized by symptoms so slightly marked that the inflammation was detected only in the course of examination for other lesions, such as hernia, for instance, or prolapse of the rectum. This form of inflammation was characterized by thin, scanty discharge, by redness of the parts, by slight excoriations and sometimes by slight burning on urination. It was at times associated with seat-

² Revue des Maladies de l'Enfance, Janv. 1892.

worms, sometimes followed exanthemata and nearly always was found in the filthiest of the poor.

The gonorrhœal inflammation is characterized by profuse purulent discharge; by swelling; redness and slight excoriations of the external genitalia; by hyperæmia of the mucous membranes so intense that bleeding is occasioned by gentlest manipulations; by pain on urination; by severe bellyache, noted particularly in the hypogastric region, usually intermittent but sometimes so constant as to keep the child awake the entire night; by increased tenderness of the womb; and an increase in its size; by fever and its concomitant symptoms and by the fact that it is obstinate to treatment.

On examining slides of what might be called the irritative forms of vulvitis, for in no case that I observed was the vagina affected, these preparations showed micro-organisms present in great numbers and in great variety, but in no case were any discovered which bore even a faint resemblance to the gonococcus. One case of traumatic vulvitis accompanied by fairly profuse discharge failed to show the gonococcus. This result is difficult to reconcile with the findings of Vibert and Bordas, who, on examining the discharge of children suffering from traumatic vulvitis found diplococci similar to gonococci in all respects. It is possible that in the cases they examined the inflammation was not as purely traumatic as they supposed.

The term vulvo-vaginitis given to this affection is less misleading than is this term when applied to gonorrhœa in women. In the latter case the inflammation rarely involves the vagina but attacks the urethra, the vulva, its glands and mucous membrane of the cervix and uterus, either sparing the vagina altogether or involving it in the inflammation secondarily as a result of irritation incident to the contact of the uterine discharge. In children there is in addition a true vaginitis as shown by the increased tenderness and redness of the mucous surface, the tendency to bleed on irritation and the profuse discharge which can be pressed out through the opening of the hymen by means of a finger passed into the rectum. It is probable that the vaginal mucous membrane of children, unlike that of the adult offers a favorable soil for the growth of the gonococcus, and indeed, this is indicated by the researches of Welander,¹ who describes a number of cases of acute gonorrhœal vaginitis in young girls who were recently deflowered;

¹ Arch. für Dermatologie und Syphilis, XXIV, Jahrg. Erst. Hft.

though he never saw such a case in women who had become habituated to intercourse.

In at least two cases in which the urethra was examined acute urethritis was found. In both cases the water passed after careful cleansing of the vagina and vulva contained pus and in both by means of a glass rod passed along the anterior vaginal wall, a small drop of pus could be milked from the urethral orifice. As in the case of adults, I believe in children that the endometrium is frequently involved in the inflammation. This is probably the cause of the severe bellyache noted in a number of my cases and of the marked tenderness and swelling of the womb readily detected by examination through the rectum. In none of the cases did I find that the inflammation had travelled along the tubes or involved the peri-uterine tissues, though that this may occur is shown by a number of reported cases, death having been caused in one instance by peritonitis excited in this way.

It seems fairly clear then, that there are two distinct types of vulvo-vaginitis occurring in children, namely the simple inflammatory, or catarrhal and the gonorrhœal. From the statements of a number of medical men who have large practices among children and who are attached to institutions and hospitals, the catarrhal vulvo-vaginitis is much more frequently encountered than the gonorrhœal. This form of inflammation usually depends upon depressed conditions of the system such as are found in the various cachexias and such as follow the eruptive fevers, associated with a local exciting cause such as manipulation, seat-worms, skin eruptions or filth. In my own experience the urethra and vagina were never involved in these cases, the trouble being limited to a vulvitis, indeed it seemed to me quite comparable to the balanoposthitis so frequently observed in male children and which never invades the mucous membrane of the urethra. Dr. Louis Starr, has, however, observed involvement of both urethra and vagina. The symptoms are usually so mild that except in the well to do they excite no attention. There may be slight pain on urination due rather to the trickling of the urine over the inflamed vulvar surfaces than to hypersensitiveness of the urethra. The external genitalia if not kept clean may, from decomposing discharges, become acutely inflamed.

This form of inflammation is not contagious, does not excite purulent ophthalmia and yields readily to mild antiseptic and astringent lotions when the underlying constitutional dyscrasia-

sia is corrected and when the direct exciting cause is removed.

The gonorrhœal vulvo-vaginitis depends upon the presence of the gonococcus, the genito-urinary tract of female infants seeming to offer peculiarly favorable conditions for the multiplication of the microbe. The disease is actively contagious. If the discharge is inoculated upon the conjunctival surfaces it causes gonorrhœal ophthalmia. It invades the urethra, vagina and mucous membrane of the womb, and yields very slowly to local treatment.

The treatment of these cases is a matter of some importance. A microscopic examination of the discharge will at once determine whether there is present an irritative catarrhal trouble or a gonorrhœal inflammation. If gonococci are absent, systemic treatment, the removal of the exciting cause and the use of cleansing and slightly stringent washes such as those containing boric acid, followed by a dusting power of zinc oxide will generally bring about a cure.

When gonococci are found, the case will require careful and continued attention. Regulation of the bowels, the administration of remedies calculated to make the urine bland and, the observance of local cleanliness are, of course, first to be considered. The local treatment which yielded the best results was conducted on the following lines: By means of a syringe, to which was attached a small soft rubber catheter, the vagina was washed out thoroughly, first with a 1 per cent. bicarbonate of soda solution, then with a 1 to 10,000 bichloride of mercury solution, to which was added in a few days fluid extract of *hydrastis canadensis* in the strength of 1 part to 20, or nitrate of silver in the strength of 1 to 6000. These cleansing, antiseptic and astringent washes were repeated twice a day. After each irrigation the external genitalia were dried carefully by means of absorbent cotton dusted with iodoform; or, if this proved irritating, with zinc oxide, and the dressing was finally completed by inserting between the labia a thin wad of absorbent cotton.

Cases thus treated were usually well at the end of about three to five weeks. Dr. Roland Curtin advises that the vaginal flushings should be so managed that there is sufficient distention to obliterate the rugæ, and thus allow the lotion employed to affect the entire vaginal surface.

Some of these cases, in spite of most careful treatment, become chronic and last for months, or even years. Indeed, it is

not unreasonable to suppose that the inflammation may, if long lasting, occasion permanent crippling. In the chronic cases some constitutional vice is the underlying cause of the persistence of trouble, and cure can only be effected by combining local with general treatment.

In response to a letter of inquiry addressed to a number of practitioners of Philadelphia who see many children, answers were received which, with some exceptions, agree with the statement already made.

All were agreed that the disease occurs most frequently in the poor and improperly cared for.

Dr. Louis Starr classifies the cases as specific and non-specific. Dr. Roland Curtin as specific and catarrhal or irritative. Dr. Edwin E. Graham as specific, gonorrhœal, diphtheritic, etc. Dr. Wharton Sinkler as scrofulous, gonorrhœal and irritative (ascarides, filth, masturbation, etc.).

The cause is commonly assigned to *scat worms*, malnutrition, eruptive fevers, irritating urine, traumatism, filth and, finally, gonorrhœal infection. An anomalous membrane partially occluding the vulva was observed as a cause by Dr. Graham in two cases.

In regard to the age at which it occurs, it has commonly been noted between the fourth and sixth year, though Dr. Morris Lewis states that in his experience he has seen it most frequently between the eighth and tenth years.

Very few of the physicians were able to trace gonorrhœal infection.

Dr. Roland Curtin has seen endometritis follow sometimes; other observers noted no involvement of the womb, tubes or ovaries.

Even in the mild irritative form the urethra was affected in a number of cases.

The treatment was, in all the answers received, tonic and supporting, supplemented by the use of mild alkaline and antiseptic washes.

It seems fair to summarize the study of this subject as follows:

1. Vulvo-vaginitis in children may be *gonorrhœal* or *irritative*.
2. Both forms are prone to occur among dirty, ill-nourished children. Scrofula and the exanthemata particularly predispose to the development of either form.
3. The gonorrhœal form is rarely acquired from criminal

practices ; it is usually carried from an infected mother to her child, either during birth or afterwards, by means of the fingers, garments, wash-rags or bathing water. It is characterized by inflammatory involvement of the urethra, vagina and endometrium ; is attended with fever, local pain and often severe belly-ache, and has a tendency to become chronic.

4. Gonorrhœal vulvo-vaginitis may occur at any age. It is probably more common in the first two years after birth. It may be complicated by gonorrhœal ophthalmia ; by gonorrhœal rheumatism ; by any of the complications and sequelæ of gonorrhœa in the adult. Its discharges are highly contagious, not only by actual contact, but through the medium of baths, bed-clothes and garments. Hence a prompt diagnosis is of extreme importance, and in institutions cases must be separated from other non-infected inmates.

5. A positive diagnosis can be made only after microscopic examination of the urethral discharges. Since the disease may be acquired in many ways impossible to trace, and since competent observers state that there are other micro-organisms in the vulvar discharges of vulvitis identical in appearance and staining reaction with gonococci, great weight cannot be attached to the finding of these bacteria in medico-legal cases.

6. The treatment consists in frequent injection of the vagina by means of an irrigator and a small, soft rubber catheter, with hot soda solution, followed by hot bichloride solution 1:10,000, or silver solution 1:6000 ; dusting of the vulva with finely powdered zinc oxide powder, and dressing with dry cotton inserted between the labia. Cure usually results in three to five weeks. Sometimes, when parents are careless of treatments, the inflammation becomes chronic and runs on indefinitely.

7. The catarrhal or irritative form of vulvo-vaginitis is most frequent from the fourth to the sixth year of life. It may be excited by attempts at rape or other traumatism. Its commonest cause is seat-worms and dirt.

8. It is not yet proven that this form is contagious, or is followed by any of the complications of the gonorrhœal form. It rarely invades the urethra ; often spares the vagina and occasions but slight local symptoms and no systemic disturbance. Exceptionally it may be the precursor of local diphtheria or gangrene (*noma pudendi*).

9. Except in the scrofulous, cachetic and persistently dirty, it quickly yields to mild cleansing and astringent washes, and general tonic treatment.

A SOMEWHAT UNUSUAL CASE OF LUPUS ULCERATION OF THE NOSE.¹

BY

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Clinical Professor of Dermatology in the Jefferson Medical College, Philadelphia, etc.

THE case of nose ulceration which I desire to bring briefly to the notice of this Association and thus put on record, is one which came under my care at the Philadelphia Dispensary for Skin Diseases, in December, 1881. The case was of more than ordinary interest owing to the peculiar clinical appearances. The patient, a girl of 12 years, had been referred from Dr. P. D. Keyser's service at the Wills Eye Hospital by Dr. F. M. Perkins, with a note stating that she had been receiving attention for a recurrent phlyctenular keratitis of scrofulous nature, and had been taking for some time, more or less irregularly, such alteratives as codliver oil, iodoform and iodide of iron.

The case as I first saw it may be best described by the memoranda taken from the note-book: *Area of disease*—whole right ala of nose, extending up that side about a half inch, up the interior of nostril about the same distance, and across the nose to the ala of the left side. *Appearances*—uppermost portion red, in places moist, slightly infiltrated, and covered at some parts with unhealthy discharging granulations, with here and there crusting; lower down, raking in the ala, dorsum and edges, the tissue was somewhat spread out and flattened, superficially fissured and considerably thickened, and more or less papillomatous; across the end of the nose were few fissures and crusted points; under the organ contiguous to the mucous membrane and extending toward the lips, the skin was thickened, of brownish color and somewhat eczematous in appearance; tissue of outlet of the right nares slightly eaten away; the canal was somewhat narrowed and the mucous membrane apparently gone, giving place to hypertrophic unhealthy-looking granulations, with the surface more or less fissured; just at the junction of the lower part of this side of the nose with the face was a slight loss of tissue; there was a trifling muco-purulent discharge from this nostril. In its entirety the affected

¹ Read at the Sixteenth Annual Meeting of the American Dermatological Association, held at New London, Conn., Sept. 13, 14, and 15, 1892.

part presented an enlarged and mushroom appearance, some portions red, some crusted and others papillomatous and fissured. This cauliflower-like ulcerated area terminated, as a whole, somewhat abruptly into the surrounding healthy skin; in several of the bordering parts, however, there was a brownish-red infiltration, this being most marked, as already stated, just under the nose. There was no bone involvement and no flattening or sinking in of the bridge of the nose.

Statement of general condition and other remarks.—Brown hair, blue eyes, medium weight, sallow and weak looking, with a dingy, pasty skin; blepharitis of both eyes, corneal opacity of right eye; teeth good; left tonsil enlarged; cervical glands enlarged, but not prominently nor painfully. *Past history*—was born healthy, at full term; is the fourth child; had measles when nine years of age, since which time or shortly afterward, with some variation, ocular trouble had existed; two years ago, the first symptom of present cutaneous disease presented, beginning as a little white scab at the nasal opening; the disease has progressed steadily but slowly and irregularly since. Her health for the past year or two has not been good, but no distinct disease has developed. There had been no symptoms pointing toward lung disease. *Family history*—parents both healthy, and of Irish birth; have nine children, all of whom are living and, excepting the patient, healthy; oldest child aged 22, youngest 6; mother had a miscarriage, at three or four months, after the third child—between the third child and the birth of the patient—which she thinks was accidental and due to heavy lifting; there has been no eruption, except the eruptive fevers, in any other member of the family; and no history of tuberculosis. For about two years before the patient was born, according to the mother's statement, the father was loose in his habits.

It will be seen from the above notes, and also from an examination of the accompanying photograph showing the clinical appearances (Fig. 1), that as between syphilis and scrofuloderma—lupus—a correct diagnosis was only to be reached by a careful sifting of all the available evidence, by observation of the progress of the case, and by the possible necessity of resorting to the therapeutic test. My own opinion, which I may say was not shared by one or two others who saw the case at that time, was that the disease was lupus; and this judgment was founded chiefly upon negative grounds—the extremely slow progress of the disease, the former good health of the patient,

the absence of any tendency to bone involvement and of any former symptoms pointing toward syphilis. At the same time there was an element of doubt, due somewhat to the objective appearances, the suspicious flaw in the father's history, and the fact of a miscarriage just antedating the patient's birth and shortly after the father's lapse from virtue. This doubt was not diminished by the inspection of a photographic illustration (Fig. 2) of a case of "syphilitic ulceration of the nose" reported by the late Dr. S. W. Gross in the *Photographic Review of Medi-*



FIG. 1.—LUPUS CASE.

cine and Surgery for February 1872. The essential notes of Dr. Gross' case are as follows:

T. M., a boy of eleven years of age, was brought to the Surgical Clinic, of the Jefferson Medical College, May 20, 1871, on account of a foul ulcer of the nose, which commencing at the junction of the nasal bones with the upper lateral cartilages, involved the integuments of the entire lower half of the organ and a small portion of the upper lip. In shape the sore was irregularly ovoidal; its edges were firm and compact; the

surrounding parts were the seat of a dull reddish-yellow discoloration; its surface was excavated and covered with a moist greenish-yellow scab; the discharge was thin and excessively offensive; while it was unattended with pain, and had never bled. The upper central incisors were dwarfed and notched; several scars were visible on the forehead and the bridge of the nose, the latter being somewhat flattened; and constant headache, of several months' duration, and aggravated at night, was a distressing symptom. Four months previously when the



FIG. 2.—SYPHILITIC ULCERATION.

lad was suffering from psorophthalmia, the nose was affected with what, from the description given by the parents, I assume to have been syphilitic acne, for which an irregular practitioner applied an irritating ointment, under whose influence ulceration set in. The mother has never evinced any of the phenomena of specific disease, but a year and a half before the birth of the patient the father contracted a chancre, which was followed by secondary symptoms. The parents state that the child was born at full term; that they never noticed any eruption upon his body; that he was affected with coryza, or

"snuffles," during infancy; and that at the age of four years he was attacked with a violent ophthalmia, which was attended with profuse purulent discharge and blindness for upwards of six weeks. At the present time, however, there are no marks of iritis or interstitial keratitis.

This case, as the notes and photograph show, resembled mine strongly in its objective characters, but differed materially in history, duration, progress and other respects. The photograph was taken just after the beginning of treatment, after the crusts had been removed and active granulation had set in, and presents, as will be seen, a strikingly similar condition to that observed in my patient. This case under moderate doses of potassium iodide and mercury along with mildly stimulating external applications, made a complete recovery in three months.

While believing my case to be one of lupus, it was deemed advisable, under the circumstances, to give the patient the benefit of any possible doubt, and she was therefore immediately placed upon specific treatment, consisting of potassium iodide and mercury, along with nutrient and other tonics; the lesion itself was dressed upon general principles. This line of treatment was continued, with an occasional break due to the patient's neglect, for several months; but no impression was made upon the disease, nor was its progress stayed in the least. It is true that its progress was and always had been exceedingly slow, and if studied from week to week was imperceptible, but if carefully watched from month to month its advance, although slight, could be appreciated. At this time, and in fact at an earlier date, the suggestion of active operative treatment was made but not favorably received. Mild caustic measures were used to temporize, and codliver oil administered, while from time to time the advantages and eventual necessity of operative measures were kept before the parents. For this reason doubtless, after the patient had been under my care for almost a year, she was withdrawn, and remained away for about the same length of time, returning in early April 1884. In the meantime she had been applying such simple applications as cold cream and vaseline.

It was now about five years since the disease made its appearance, and more than two years since it came under my inspection. At this time the area of disease was at least one-third to one-half larger than when the patient first appeared at the

Dispensary. It still presented the same general features, the mushroom or cauliflower appearance being its most striking characteristic. The infiltration of the skin just underlying the nose was now much more typical of lupus deposit. In obedience to my advice, and with the assistance of the late Dr. Henry Wile, I thoroughly curetted the whole diseased area, supplementing this at the time with an active linear scarification and a momentary cauterization with caustic potash. Progress toward



FIG. 3.—LUPUS CASE, RESULT OF TREATMENT.

healing was rapid, and in the course of six to eight weeks complete cicatrization had taken place, although at some points in the border were to be seen minute islets of brownish-red infiltration. The second photograph (Fig. 3), taken at this time, shows the satisfactory result achieved.

This case was seen by me only once again, and that was two months later. It was noted that the good result continued, except that the minute brownish-red islets referred to as remaining or reappearing after the operation had possibly become a

little more conspicuous, and were somewhat suggestive of the beginning tubercles which, unfortunately, too often show themselves in the scars of this disease. A secondary ennetting of these little points was suggested, as of essential importance for a permanent cure, but the parents were contented with the present state of affairs and preferred to wait further developments. This, I regret to say, ended my observation of the case, recent efforts to have communication with the family who lived out of town, and who may have since removed from their former residence, having been unsuccessful. It is possible, of course, that there may have been no relapse, although the presence of the brownish-red infiltrated points led me to fear that sooner or later a recurrence would ensue.¹

THE ASSOCIATION OF PURPURA AND ACUTE CIRCUMSCRIBED OEDEMA.²

BY

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HENOXH³ and, later, Couty⁴ were the first writers to call attention to a form of purpura characterized by recurring attacks of cutaneous hemorrhage, associated with gastro-intestinal disturbance and acute oedema of the skin and subcutaneous tissue. There were frequently present, in addition, pains in the joints together with articular effusion and extra-articular oedema. Couty, by collecting and analyzing a considerable number of cases, came to the conclusion that this class of cases should be separated from all varieties of purpura. This form is characterized by a brusque onset, and the several symptoms are inclined to come in distinct attacks. Of these cases there is a great divergence in the prominence of the several symptoms. In some, the cutaneous oedema is the chief feature, the purpuric eruption holding a secondary place. Sudden attacks of acute swelling of a limb or part of a limb occur, which quickly

¹ Curiously enough, the day after the reading of this paper, I received a note from Dr. P. D. Keyser, of the Wills Eye Hospital, of whom I had personally, within a week, made inquiries as to his knowledge of the whereabouts of the patient, stating that she had that day again, for the first time since 1881, presented herself at his clinic; that the lupus had recurred the past few years, for which she was now under the care of Dr. Laplace, who had recently treated the case with injections of tuberculin, with considerable improvement.

² Read before the American Dermatological Association, at New London, September, 1892.

³ Berlin, *Klin. Wochenschrift*, 1874.

⁴ *Gazette Hebdomadaire*, 1876.

subside to be followed by other attacks of the same nature. In other cases the cutaneous disturbance is almost nul, the only feature of prominence being successive crops of purpuric patches, with vomiting and diarrhoeas occurring often in the intervals between the outbreaks of purpura. These gastro-intestinal disturbances may in their turn constitute the salient feature, the patient suffering from severe attacks of colic with nausea and vomiting, while the pathological appearances on the cutaneous surfaces are very slight. County considers, therefore, that there are four sub-divisions of this form of purpura: one, the purpura is complicated with cutaneous œdema and gastro-intestinal crises; two, the purpura is complicated with œdema; three, the purpura is only accompanied by intestinal troubles; and four, the purpura exists alone.

Some later writers are unable to see the necessity of separating these forms from the classical purpura. Immermann, in *Ziemssen's Encyclopedia*, remarks "we cannot understand why Hænoch should be inclined to regard such cases as constituting a special form of disease entirely distinct from morbus maculosus," and Atkinson in *Pepper's System* is of the same mind. Latterly, Osler¹ has published two cases in an article entitled "A Form of Purpura." The characteristics of this form are first, recurring outbreaks of purpura often associated with urticaria or local œdema: second, articular pain sometimes with swelling; third, gastro-intestinal disturbance with vomiting, diarrhoea and occasionally hemorrhage: fourth, hematuria, albuminuria, and sometimes a fatal nephritis. The first of his cases occurred in a boy of six who was seized with attacks of colic and diarrhoea accompanied by an urticarial eruption tending to become purpuric, and by moderate hemorrhage from the bowels. Later, œdema of the ankles and legs appeared and the boy died in six weeks of Bright's disease. The second case, a man of forty-six, began with pain in the arms and knees, with œdema and purpuric patches of the skin together with severe paroxysms of colic and diarrhoea, but no blood in the stools. Albumen and blood were passed in the urine. He recovered in a few days. Osler considers that these cases belong under purpura rheumatica of which they constitute the most aggravated and serious form. The modern French writers as Brocq and Besnier in dealing with this subject refer to an article on purpura in the *Dictionnaire des Sciences Médicales*, by Albert

¹ N. Y. Med. Journal, Dec, 22, 1888.

Mathieu, as representing the best exposition of the subject. Mathieu includes the form under consideration in his *purpura exanthématique rhumatoïde* a type that ranges from *purpura simplex*, limited to the lower limbs and accompanied perhaps with slight articular pains, to the cases of general purpuric eruption with internal hemorrhage and severe articular symptoms. Gastro-intestinal disturbances and cutaneous manifestations in the form of multiform erythema, urticaria, erythema nodosum and acute oedema, are regarded as symptoms belonging to this type, although very variable in their occurrence; and thus the form of Couty is also included under this general heading. The acute fulminating forms with high fever and typhoidal symptoms, Mathieu classifies as *purpuras infectieux*.

Two cases that were accompanied by purpuric manifestations have lately come under my observation which I will briefly describe.

Case 1. A boy one and a half years old, well nourished. No family history of importance could be elicited. Had been well until two days previously, when the mother noticed in the evening that the left ear was considerably swollen and also the left lower leg and the right fore-arm. Over the affected areas a few purpuric patches could be seen. The child was fretful and uncomfortable. Two days later, when seen at the Carney Hospital, the oedema of the ear had disappeared. The left lower leg was the seat of a very marked oedema, without redness or inflammatory appearances. The oedema extended from the knee to the ankle, where it ended quite abruptly. The skin of the affected part was quite tense and the oedema firm and hard, pitting only slightly on pressure. Numerous small hemorrhagic spots were seen in the oedematous area. Upon the right fore-arm was a similar oedema, very tense and rising to a considerable height at the centre, covered also with small purpuric patches. The left fore-arm was normal, but at the base of the left thumb there was another sharply elevated area of acute oedema. The child was restless, bowels regular but stools said to be black and offensive. The next day the oedema had almost entirely disappeared from the left leg and right arm, while the right leg and foot, normal the previous day, were the seat of an enormous oedema covered with purpuric spots. The left forearm also had become greatly swollen over part of its extent. A few hemorrhagic spots were noticed on other parts of the trunk and extremities and those seen the previous day were much less prominent. There was some swelling and redness of the hard

palate. The child had a good appetite, taking plenty of milk. The bowels moved two or three times, the stools being reported to be "coal black"; otherwise there were no hemorrhages from mucous surfaces. The temperature had oscillated between 100 and 101 degrees F.; the pulse was about 120. The child was not seen again as it was taken away from the hospital against advice.

Case 2. Was seen at Lynn with Dr. H. W. Newhall. The patient, a stout well nourished girl of seventeen, twelve days previously was seized with a sudden, intense pain in the calf of the leg, which continued for several days. Next came an attack of vomiting and gastric pain, and since has had similar attacks at intervals, besides severe pain in various joints without appreciable swelling. There had been, however, a very pronounced acute swelling of the whole back of the left hand which had subsided rapidly. Six days ago an eruption was first noticed on the buttocks, and later on the legs and body. When seen the face was pretty well covered with an erythematous eruption, bright red and slightly raised, suggesting measles somewhat. On the ears were one or two hemorrhagic patches with bullous lesions on the surface. On the upper part of the chest and back was a fainter eruption of an erythematous and in places urticarial character. Very little eruption on the abdomen. The buttocks were the seat of very marked cutaneous disturbance, being covered with hemorrhagic spots, upon some of which bullae had formed, which were filled with blood. Others had been broken by scratching and blood crusts had formed. On the thighs there was very little cutaneous change, but on the legs and soles of the feet there were numerous purpuric patches. The extensor surfaces of the hand, especially the knuckles, were covered with purpuric patches and hemorrhagic bullae. There was a moderate fever, about 101 degrees F. There were no hemorrhages from the mucous surfaces. The patient made a good recovery, the disease having apparently reached its acme when seen.

It is to be noted that in the first of these cases the chief symptom was the acute circumscribed edema, the purpura being quite insignificant by comparison. In this case there were no gastro-intestinal disturbances, with the exception of probably slight hemorrhages from the bowels. In Case 2, the striking feature was the purpuric and bullous eruption, almost multi-form in character, as it appeared combined with urticarial and erythematous patches. There was marked colic coming on in

paroxysms. There was one attack of acute circumscribed oedema.

There can be no doubt that these two cases are instances of the type of disease described by Henoch and Couty as purpura of nervous origin.

Turning now to acute angioneurotic, or circumscribed oedema. First described by Milton under the name of giant urticaria, it has received attention of late at the hands of Quinke,¹ Riehl,² Strübing,³ and quite recently of Joseph⁴ and of Osler.⁵ Its characteristics are well known to all dermatologists, and I think all will agree that it is not so uncommon as many of the writers of late have assumed. Its etiology remains obscure, although the general opinion prevails that it is produced through the agency of the nerves, and for this reason it has been called angioneurotic. It has been abundantly shown that in some cases the affection is hereditary. This was asserted first by Quinke, and Osler has published a remarkable instance of its persistence in the members of one family through five generations. In these cases there were also attacks of nausea, vomiting and diarrhoea. The association of its occurrence with the menstrual and climacteric periods has also been noted. Banke,⁶ the director of a water cure establishment, has recently published an article in which he reports two cases of acute oedema in patients affected with cerebral and spinal irritation. In one the occurrence was often coincident with the menses. Traumatism may cause sudden and alarming attacks of oedema in the neighborhood of the part violated, as in three cases published by Horwitz.⁷ Over indulgence in alcohol has been proved in a case of Joseph's to furnish the exciting cause of these attacks. In other cases there have been articular pains and swellings at the time of the outbreaks. Attacks of colic, nausea, and vomiting have frequently accompanied the oedematous swellings, a fact that has often been emphasized.

The association of acute cutaneous oedema with hemorrhages in various places is the point to which I wish to call especial attention. Joseph⁸ has related before the congress of Prague a

¹ Monatsheft. f. prakt. Dermatologie, 1882.

² Wiener Med. Presse, 1888.

³ Zeitschrift f. Klin. Med., 1885, IX.

⁴ Ergänzungsheft zum Archiv. f. Derm. u. Syph., 1889.

⁵ Ann. Journal of Med. Sciences, 1888, Vol. II.

⁶ Berlin. Klin. Wochenschrift, 1892, No. 6.

⁷ Phil. Med. News, Apr. 16, 1892.

⁸ I. c.

case of acute circumscribed edema of the skin with paroxysmal hæmoglobinnuria. Dr. J. G. Mumford¹ reports a case of a man who had been a bleeder and had had attacks of purpura and dangerous epistaxis, who developed an enormous swelling of the jaw upon the right side, which threatened suffocation, and finally subsided after opening into the mouth. Large clots and a great deal of blood were discharged from the opening. A further instance of the association of cutaneous hemorrhage and acute edema has lately come under my own observation. A girl fourteen years of age was seen with purpuric patches over the lower legs with a few urticarial lesions interspersed. There was considerable pain in the joints. According to the mother's story many of the wheals on their disappearance leave purpuric spots. Two years previously the child had a similar attack lasting five months, accompanied by sudden acute swellings reaching an enormous size over various parts of the body, which always subsided quickly. A case is reported in the *Boston Medical and Surgical Journal*, by Dr. W. H. Holmes² entitled "A Case of Acute Local Edema Complicated with Purpura and Salivation." This case corresponds in most respects with the first case I have reported, and it is therefore to be classed with the cases of Henoch and Conty. Here, too, as in my own case, the local edema was the feature of greatest prominence and the hemorrhagic lesions slight. It is not strange that the affection should be described as an acute edema, and it may well be demanded, why is it not to be regarded as an acute edema and the purpura as a complication? It should be constantly borne in mind, I think, that both purpura and acute edema are properly speaking symptoms merely, although it may be impossible in the present state of our knowledge regarding their pathology to avoid using these terms oftentimes as if they represented well defined affections.

Thus it seems possible that some of the cases of acute edema, complicated with gastro-intestinal troubles, belong in the same class, or may have the same etiology as the nervous purpura of Henoch and Conty. All they lack to be included in this class is the presence of another symptom, to however slight an extent, namely, hemorrhage into the skin. It has been abundantly shown, that the other symptoms that accompany this form of purpura, as gastro-intestinal disturbances and pain and swelling of the joints, occur in many of the cases described as angio-

¹ Boston Med. and Surg. Journal, March 5, 1891.

² May 14, 1891.

neurotic oedema. Urticaria and erythema are occasionally observed in connection with the form of purpura under consideration, as was well illustrated by the second of my cases; and in acute oedema there is sometimes a typical urticaria seen. The relationship of purpura and acute oedema has already been indicated, I find, by Osler, in his article on a form of purpura, which has been referred to above. His cases, which represent the type of Henoch and Conty, he considers to belong under purpura rheumatica. He observes "Are these cases truly rheumatic, or is not the articular affection on which so much stress is laid analogous to what we see in hemophilia and scurvy?" It is difficult to escape from the former view in the presence of characteristic cases of peliosis rheumatica with endocarditis and pericarditis, and yet the close relationship and even interchangeability of certain of these cases of purpura with urticaria, with erythema nodosum, and with the angioneurotic oedema, favor the suggestion that the entire group may depend upon some poison,—an alkaloid, possibly, the result of faulty chylipoietic metabolism, which in varying doses in different constitutions, excites in one urticaria, in a second peliosis rheumatica, and in a third a fatal form of purpura.

It seems useless at the present time to attempt a strict classification of the different forms of purpura. The various forms described as purpura simplex, purpura hemorrhagica, etc., merge into one another, and are complicated with other symptoms in the most puzzling way. The investigation of Letzerich and more especially of Kolb would make it probable that some of the more acute and fatal cases are due to the action of a bacillus and its products. Kolb's work in Berlin upon three fatal cases of the type described by Henoch as purpura fulminans, revealed the presence of a bacillus which produced when inoculated in pure culture upon a large number of animals, purpuric spots and general internal hemorrhages. It is interesting to note that the products of the parasites were also capable of producing these appearances, as cultures that had been sterilized and filtered gave the same results upon inoculation.

Cutaneous oedema also, it seems to me, should be looked upon as essentially a symptom and not always due to the same cause. Its relationship to urticaria is very close, and it is with little doubt produced through the media of the nervous system. Just what the mechanism is, remains purely speculative in the absence of more thorough knowledge of the action of the nerves on the cutaneous vessels.

Society Transactions.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

SIXTEENTH ANNUAL MEETING, HELD AT THE PEQUOT HOUSE, NEW LONDON, CONN., SEPTEMBER 13 AND 14, 1892.

The PRESIDENT's address was delivered by DR. E. B. BRONSON, of New York.

The Use of Iodine, Carbolic Acid and Chloral in Dermatology.¹—DR. C. W. CUTLER, of New York, then read a paper with this title.

DR. J. C. WHITE said that all were familiar with the antiseptic action of carbolic acid and iodine, but it was a surprise to him to learn that chloral also possessed such properties in any marked degree. He would like to ask the author what evidence there was that such was the case. There seemed to be no good reason for believing that this combination of carbolic acid, iodine and chloral would be capable of producing a cure any more rapidly than the substances commonly employed for such purposes, yet he had been struck by the remarkable results which the author had apparently secured, results which he had never been able to obtain. For instance, he did not see how it was possible to cure permanently a long-standing case of ring-worm of the scalp in a period of from one to four weeks, and he would, therefore, like to inquire of the author concerning the number of such cases in which he had succeeded in securing such rapid results, and in which there had been no relapse at the end of six months.

DR. M. B. HARTZELL said that the statement was frequently made that strong carbolic acid is an anæsthetic, but his own observations did not bear out this view. A case of lupus erythematosus which he had been treating in the University Hospital with pure carbolic acid had been compelled to remain there for three or four hours after the application, on account of the intense and almost intolerable pain which it produced. He had not yet seen a single case in whom such an application had not produced severe pain lasting for several hours. Of course, when dilute solutions were applied to the skin, they produced, after awhile, a sensation of numbness and a diminution of tactile sensibility, but pure carbolic acid could not be called a local anæsthetic.

DR. H. G. KLOTZ doubted whether any special curative properties could be justly attributed to this combination of carbolic acid, iodine and chloral, which were not possessed by a mixture of iodine and carbolic acid, unless it were that the addition of the chloral resulted in a new chemical combination which possessed a special penetrating power.

DR. J. N. HYDE said that if he had understood the author correctly, he claimed that the use of this mixture had resulted in a return of the pigment in decolorized patches of vitiligo. This was certainly very unusual. He had never seen such a return.

DR. C. W. CUTLER, in closing the discussion, said that he had frequently omitted the chloral from the mixture, and had obtained, under these cir-

¹ See October issue of this Journal.

circumstances, decidedly inferior results. Without the chloral, the irritant effects of the solution seemed to be decidedly increased and the penetrating power of the remedy lessened. He had consulted a chemist with reference to the question of a new chemical combination being produced by the addition of the chloral, but he had only received as yet a preliminary report, which stated that these three substances did unite to form a complex chemical compound.

He had been surprised himself at the rapidity of the cure in cases of ringworm of the scalp. The period of treatment with this combination was only three or four weeks, yet the cure seemed to be permanent. He did not mean that in this short time the hair had entirely returned, but that the growth of new hair was fairly under way. He had been able to follow a certain proportion of his cases for a period of from six months to one year, and was certain that in 75 per cent. of his cases there had been no relapse at the end of this time. In leucoderma he thought if Dr. Hyde would apply this agent as often as the resulting reaction would warrant, he would find that the pigment would return in the vitiliginous patches, and would be permanent. The good results were probably produced by the continual counter-irritation, and not by any staining property of the remedy employed.

Sarcoma Cutis. This was the title of a paper by DR. M. B. HARTZELL, of Philadelphia.

DR. J. N. HYDE said that he had been impressed with the rarity of these cases. During the past four years he had seen but two—one of multiple non-pigmented sarcoma of the skin of one upper limb, and the other a very grave and advanced case of melanotic sarcoma of the entire lower extremity occurring in a woman. The extreme rarity of such cases among dermatologists was probably not a correct index of their relative frequency, for conversation with general surgeons and observation of their work had led him to believe that they not infrequently operated upon such cases, regardless of their having originated in the skin.

DR. F. J. SHEPHERD said that in his position as surgeon to a large general hospital he had seen very few cases like those under discussion, and the cases which did come to them for operation usually had their origin beneath the skin, and not in the skin, involving the sheaths of tendons and other parts primarily, and the skin secondarily. At the last meeting of the Association he had reported such a case of secondary involvement of the skin. During the past year he had seen two cases of the melanotic variety, both following the removal of pigmented nevi. In one, that of a lady with a pigmented naevus of the umbilical region, which was irritated by her corsets, the naevus was excised and the wound healed by first intention, but in four months she returned to him with a well-marked melanotic sarcoma at the site of the operation, and in six weeks she died of secondary involvement of the liver. This organ was literally studded with melanotic growths.

DR. H. W. STELWAGON had had an opportunity of seeing the first case referred to about a year ago, after it had been operated upon by Dr. Agnew and before it came under Dr. Hartzell's care. The lesions were peculiar, being decidedly framboesic, and varying in size from a small pin-head to a large finger-nail. If the upper third of a strawberry were somewhat flattened and set into the skin, it would simulate the well-developed lesions

very closely. They began as small "blood blisters," and although appearing vesicular, they were really solid. Before coming under his care, the patient had been treating himself for a long time, latterly with iodide of potassium, and hence the speaker was inclined to think at first that the appearances were partly medicinal. Expectant treatment for a few months produced no change. The patient then disappeared, and was next heard of as being under Dr. Van Harlingen's care, who, he was informed, while doubtful as to the true nature of the disease, was inclined to view it as an unusual mycosis fungoides. The speaker had been much surprised to learn subsequently, through Dr. Hartzell, that the patient's limb had been amputated.

As to Dr. Hyde's statement that the surgeons probably saw more of these cases than do those engaged in dermatological practice, he would merely say that this does not seem to be the experience of the Philadelphia Hospital, as such cases occurring there would come to his knowledge. In his service there of five or six years he had seen but two cases, both of which came to the skin ward. In both cases the disease was quite widely distributed, and both ended fatally. A third case came under his notice in private practice. Of these three cases two were women, a fact of interest in connection with the statement made in the paper that the disease was more frequent in males.

DR. R. B. MORISON said that, although he had a very large clinic, he had never seen a case there of sarcoma of the skin, but he had heard of two or three in the hospital which seemed to support the view of Dr. Hyde.

DR. M. B. HARTZELL, in closing the discussion, said that he wished to call further attention to the distinction which should be made between pigmented and melanotic sarcoma, if for no other reason than because of their very marked differences clinically. A melanotic sarcoma is extremely malignant, running its course sometimes in the course of a few weeks, and resisting surgical interference. In the pigmented sarcoma the pigment is very often simply blood pigment, but in melano-sarcoma it has a different origin, and the case quoted from Klebs indicates that possibly the infectious material resides in the pigment of the neoplasm.

He had said nothing about the difficulties of diagnosis, although at times these were very great. In the first case, the diagnosis was very uncertain even after a microscopical examination, because of the very peculiar histological features of the sections. He was not acquainted with any description of sarcoma which corresponds to the appearances seen in the sections which he had made from the primary lesions. The sections made from the secondary lesions in the stump, were, however, typical sarcoma. The first series of sections were submitted to a pathologist of considerable experience, but he was unwilling for a good while to express an opinion as to the nature of the growth. The amputation was only done after the urgent and persistent solicitations of the patient, notwithstanding that he was told that there would probably be an early recurrence in the stump.

The Cutaneous Cicatrices of Syphilis.¹—DR. J. N. HYDE, of Chicago, read a paper on this subject.

DR. H. G. KLOTZ had been impressed with the fact that very extensive lesions of syphilis on the scalp often left comparatively insignificant cic-

¹ Will appear in this Journal.

trices. He recalled a case in which the scalp was entirely covered with deep secondary lesions, yet at the present time there is hardly a trace of cicatrices visible. He had observed that the largest scars on the trunk were most commonly situated near the scapulae. The primary lesion around the meatus urinarius often leaves no scar, while gummatous lesions, which are not infrequent, and often not recognized, often leave decidedly depressed cicatrices.

DR. F. J. SHEPHERD called attention to the fact that there was often a large cicatrix on the back of the neck due to carbuncle. He recalled one case in which a carbuncle had involved an area about eight inches vertically, and perhaps more transversely, and in which much of the hair of the scalp had been destroyed, yet, at the present time, owing to the great contraction which had taken place, there was a comparatively small scar. The largest syphilitic scar he had seen, was on the back over the lumbar region, and involving the whole of it.

DR. R. B. MORISON asked if Dr. Hyde had noted the appearance of cicatrices in the true negro, as these differed from those occurring in white people in that they lost considerable pigment, so that when first healed over, the new skin is perfectly white. After one or two years, the black color is partly restored, but there is still a noticeable difference between this and the normal skin.

DR. H. W. STELWAGON had been struck with the comparative infrequency of the late localized syphilodermata on the anterior surface of the trunk.

DR. J. N. HYDE, in closing the discussion, said that he saw very few negroes in his practice, and consequently had not noticed the peculiarity described by one of the speakers.

Cases of Favus Contagion from the Lower Animals.—DR. S. SHERWELL, of Brooklyn, read a paper on this subject.

DR. H. G. PIFFARD said that his personal observations of this disease among the lower animals were confined to the mouse and the cat. Some years ago, an ordinary gray mouse affected with favus had been brought to him, and he put it among some white mice, which were thereby infected, and presented very clearly the lesions of the disease. He did not consider that Unna's claims, that there are several different species of favus, were well founded. The varying appearances observed in the fungus growths are due to varying conditions of the nutrient fluid in which they grow. From the same mouse he had inoculated gelatine and agar tubes, and had obtained quite different appearances in these different tubes.

DR. F. J. SHEPHERD had seen this year three or four cases of tryphytosis barbe, occurring in grooms, who stated that the horses had a similar eruption about the root of the tail and mane. All of these men were accustomed to shave themselves.

DR. F. B. GREENOUGH had also seen cases of this kind, which he had good reason to believe came from the horse, although he was not in a position to furnish positive proof. He had been astounded recently at a number of cases in which there was at least a strong suspicion of the disease being conveyed by pet cats.

DR. J. C. WHITE had never seen favus in the dog, but had observed it twice in cats and mice in the same household, and in both cases the cats

were affected about the paws. Favus crusts sometimes appear upon the human subject in very unusual places without possible contagion from the domestic animals. Thus, he had on two occasions seen isolated crusts upon the penis, and not elsewhere on the patients.

How Should Dermatology be Taught?—DR. G. H. FOX, of New York, read a paper with the above title.

DR. F. B. GREENOUGH had been greatly interested in the entire paper, and was particularly pleased with the author's remarks concerning the teaching of dermatology to students.

DR. J. N. HYDE wished the paper had been longer, and the discussion more full, for he thought a mutual interchange of views could hardly fail to be of benefit to all. He was anxious to see didactic lectures abolished, and instruction made entirely clinical. He certainly hoped that we would hear further on the subject from others.

A Somewhat Unusual Case of Lupus Ulceration of the Nose¹.—DR. H. W. STELWAGON, of Philadelphia, reported such a case.

DR. J. T. BOWEN said that a differential diagnosis between lupus and syphilis was especially difficult in ulcerated lesions about the nose, and that in a certain proportion of cases we must expect to remain in doubt for some time.

DR. S. SHERWELL agreed with the speaker preceding him, and thought that in many of the cases the therapeutic test by specific treatment was often the quickest way of arriving at a correct diagnosis. In consideration of lupus, he was led on to mention a case of that affection (shown as such and confirmed at meetings of the N. V. Dermatological and Laryngological Societies), in which the lupus, present first on the palate, had afterwards progressively attacked the tonsils, causing characteristic scars, and had progressed as far down as the trachea at last examination, getting milder as it progressed. A portion of the epiglottis had been destroyed, both vocal chords consecutively attacked, etc., etc. In view of the claimed etiology of the disease, tubercular infection, it seemed difficult for him to understand why this young person had escaped general pulmonary and other phthisis. She was about fifteen when first seen by him; had been watched by him for seven years dating from last examination; for a year and a half had been put under various treatments including a couple of antisyphilitic courses, under which last, the only effect, if any, was a deterioration of health without any local effect observable. All treatment was stopped at the end of the time named and she was left alone. At the first date named she was a delicate looking maiden; is now a plump, robust and vigorous woman.

DR. G. H. FOX presented a supplementary report of a case about which he had spoken before the Association at their last meeting. It was one of lupus of the nose in which the treatment by Koch's injections had apparently been successful. At that time, there were a few suspicious spots, and some of those who saw the case did not think that it was certainly cured. He was pleased, therefore, to be able to state now that an examination of the patient made a few days ago, showed a smooth white cicatrix on the nose, thus proving that the cure had been complete and permanent.

DR. F. B. GREENOUGH heartily endorsed the remarks which had been made about the difficulties of diagnosis in cases of lesions about the nose.

DR. H. G. KLOTZ said that the reader of the paper had mentioned as one of the diagnostic points, the slow development of the disease, but he had personally become impressed with the fact that there exist syphilitic new formations which are also very slow to undergo ulceration.

DR. H. W. STELWAGON, in closing the discussion, said that he recognized that certain late-syphilodermata are exceedingly slow in their progress, but he had touched on this point, in speaking of the diagnosis with especial reference to the inherited disease in children, which usually runs a comparatively rapid course. It is interesting to note that several surgeons who saw Dr. Gross's case considered it epithelioma, this diagnosis was seemingly conferred by microscopical examination, yet within three months the disease was entirely cured by the administration of iodide of potassium and mercury.

Localized Idiopathic Atrophy of the Skin.—DR. R. W. TAYLOR, of New York, read a paper with this title.

DR. M. B. HARTZELL said that the case just reported recalled one which he had seen about one year ago, in which there were numerous perfectly circular patches, varying in size from that of a split pea to a silver dollar, situated on the nape of the neck and on the occiput. The pigment was entirely absent, and the patches were not depressed below the level of the skin. There were similar patches on the flexor surface of the fore-arms and upon the wrists. In the latter situation, the patches were irregular, and slightly depressed, and unlike those on the back of the neck, were somewhat pigmented, and had fine vessels running over the surface of the lesions. Higher up on the fore-arms, the spots were small, of a dead white color, and were arranged linearly as if following the course of a nerve. The most curious lesion was the one on the occiput, which was quite large, and although the pigment was absent from the skin, the hair growing from it was pigmented. The patient was a woman about forty-five years of age, with quite dark hair, slightly mixed with gray. This case was certainly allied to the one reported in the paper.

DR. H. W. STELWAGON had seen the case referred to by the preceding speaker, and the gross appearances of the patches, particularly the one on the back, bore a resemblance to the one reported in the paper.

DR. J. C. WHITE thought these cases never exactly repeated themselves. We have the ordinary atrophic conditions found in so called morphea or scleroderma, then, a series of multiple atrophic changes with only slight surrounding violet stains, resembling those seen in "morphea," then, isolated patches, with or without these halos, and again, round or oval patches, such as had just been shown. It, therefore, seems hopeless at present to differentiate them, and we are no nearer the pathology of these cases than we were when we recognized morphea alone.

DR. J. N. HYDE said he had been particularly interested in the paper, because last June he had photographed a case in which there were similar, though less distinctly oval patches, situated in front of the ear, and on the neck.

¹ Will be published in this Journal.

— In this connection, he desired to report a unique case of lineæ atrophicæ occurring in a remarkably well developed athletic man, who weighed about two hundred and fifty pounds, but who was not fat. There was no history of any abdominal distension, yet the whole abdominal surface was marked with these lines, which closely resembled the lineæ albicantes seen in women after pregnancy.

DR. S. SHERWELL thought the case in some of its features at least, strongly resembled morphea. Among obese individuals, this linear atrophy is very common. He had also seen it, like Dr. Taylor, in very muscular subjects. It would seem in them that the rapid stretching of the skin, by the rapid contraction of immense muscles had produced the lesion.

DR. J. S. BOWEN asked if Dr. Taylor recognized a distinct type of the disease called morphea, which was different from the case which he presented, and if so, how might they be distinguished?

DR. R. W. TAYLOR, in closing the discussion, said that investigations by Lange had shown that in cases like those described by Dr. Hyde, there has been a stretching in some way of the connective tissue bundles in their longitudinal direction. Those interested in the subject would find in the *New York Medical Journal*, January, 1885, a report of a girl who had these atrophic lines all over. She had been growing very fleshy, and this, together with her abdomen being distended, owing to a flatulent dyspepsia, explained the occurrence of these lines.

Regarding the question raised by Dr. Bowen, he would say that dermatologists felt they were treading on uncertain ground when they spoke of morphea alba atrophica. All the literature upon this subject is to be credited to the late Mr. Wilson, who said they co-existed with the lardaceous forms. This is essentially a case of atrophy of the skin, but, as has been said by one speaker, these cases differ among themselves in very many respects.

A Note on the Histology of the Molluscum Contagiosum.—By DR. H. G. PIFFARD, of New York.

He said that he had long regarded the stratum corneum as a derivative of the stratum granulosum, rather than of the stratum malpighii, but the study of the pathological histology of the skin is in a state of chaos, largely on account of the difficulty of interpreting the appearances presented. This is well illustrated by a photograph of a section of the skin, showing a portion of the epidermis, and also a body, the nature of which is not yet determined. Three gentlemen of recognized skill in this direction, arrived at different conclusions on this point after examining the specimen, one thinking it a sweat coil, another an epithelial pearl, and a third, a calcareous deposit. When using high powers with the microscope, it is now known that the image seen does not necessarily bear any relation to the real shape of the object, owing to what is termed diffraction. This point was illustrated by an exhibition of the markings on the *plenrosigma angulatum*. From the foregoing, it is evident that the conclusions founded upon microscopical appearances alone, must be accepted with considerable reserve.

Cicatricial Constriction of the Penis Producing a Condition Resembling Elephantiasis.—DR. F. J. SHEPHERD, of Montreal, exhibited a photograph of this condition.

The patient was a boy fourteen years old, who, when three months of age, fell and ruptured the penis near its root, the urethra, being com-

pletely torn across. The wound healed readily but ever since he had made his water through the peroneal end of the torn urethra at the point of injury. Nothing much was noticed regarding the penis until about one year ago when the cicatricial tissue on the under surface began to grow and gradually encircled the penis. The distal end began to enlarge, and on entrance into hospital was of enormous size. The penis looked as if it was the subject of the disease called ainhum, for the enlarged distal end was held to the proximal end by a narrow isthmus of cicatricial tissue, and dangled loosely from it. There was no pain or tenderness about the parts, only the size and weight of the enlarged portion caused the discomfort. The urine was passed quite comfortably through the torn end of the urethra. An instrument could easily be passed through the pendent portion when it was seen that apparently about half an inch of the urethra was missing.

(To be concluded.)

SECOND INTERNATIONAL CONGRESS OF DERMATOLOGY AND SYPHILOGRAPHY.

HELD IN VIENNA, SEPTEMBER 5TH TO 10TH, 1892.

The Second International Congress was not so well attended as it was hoped it might be, and American representatives were especially "conspicuous by their absence." The cholera scare undoubtedly prevented many of the European dermatologists from attending, and, indeed, the outbreak of the disease just at this time caused some talk of postponing the meeting.

However, on the opening morning it was found that over three hundred would take part in making the re-union a success, and as Professor Kaposi, in his capacity of Chairman of the Committee on Organization, arose, in the beautiful banquet hall of the new University, to open the Congress and extend a welcome to the visitors from so many different countries, it was felt by all that it would be successful.

Professor Kaposi was then elected President, and Professor Hardy Honorary President. The Vice-Presidents named were : De Amicis, Bertarelli, Boeck, Breda, Campana, Dracke, Hallopeau, Hutchinson, Jamieson, Köbner, Kaliudero, Morris, Neisser, Petrini, Stenkovenkow, Veiel and Vidal. Dr. Riehl, Secretary of the Committee on Organization, was made General Secretary.

Professor Kaposi spoke of the success of the Paris Congress and of those who had been instrumental in making it so, and referred in eulogistic terms to the dermatological work which had recently been done in France. To those from English-speaking lands he spoke his words of welcome in English, as he had addressed the French in their own tongue. Then, resuming French, he directed his discourse to those from all other countries.

Professor Neumann spoke in behalf of the Vienna Dermatological Society, and reviewed the history of the Vienna School.

The Progress of Dermatology was the subject of an address delivered by PROF. HARDY.

He referred to recent advances, especially in the matter of perfection attained in the description of morbid types, which has simplified classification. The lichen group, for example, has been reduced to lichen simplex

of Vidal, lichen planus of Wilson, and lichen ruber of Hebra, while all other varieties have been put back among the eczemas, urticarias, prurigos and keratoses. The new types, including actinomycosis and scleroderma pigmentosum, as well as new additions from the study of mycosis fungoides, disseminated lupus, Morvan's disease, etc., were discussed. Bacteriology, as applied to skin affections, was taken up, and the well-known parasitic diseases, as also certain erythemata and psoriasis, were considered in the light of recent advances. The latter disease the speaker thought wrongly attributed to a micro-organism, while there is much more probability that mycosis fungoides, xanthelasma and psorospermiosis are due to microbial action. In concluding, it was proposed by the speaker that, at the next Congress, a classification and dermatological nomenclature be adopted.

The Present State of the Leprosy Question in Europe.—DR. ARNING, of Hamburg, read the first paper on this subject.

He holds that lepra is a chronic infectious disease limited to the human species, which is transmissible, both directly and indirectly, by means of the bacillus lepræ.

The study of the extension of the disease should be made from exact statistics, and it is proposed that the Congress take the initiative in collecting such data. An estimate of existing cases in Occidental Europe places the figures at 3,000, of which Norway and Spain each furnish 1,200. The tubercular form is found in new foci in Europe, while in regions where the disease has been long endemic it is the nervous type which predominates. Isolation is regarded as the only means of checking its spread. Every new case in a city should be registered and kept under control.

Each leper must be looked upon as a point of departure for a new focus of disease. The disease has recently made progress in Europe, and has only decreased where rigorous isolation is practiced. The great increase on other continents increases the danger for Europe. The propagation from imported cases, where hygienic precautions are not taken, is beyond doubt. During the past ten years a new endemic focus has developed in Germany, near the Russian frontier, and where the disease was unknown in 1882, severe cases are now found. An international investigation would alone show whether Europe is again threatened with an invasion of leprosy. Neumann had investigated lepra in Bosnia, where it is possible that it was imported from Asia Minor by the Turks. The Government proposes to establish lazarettos here, in case the disease continues to increase.

DR. CAMPANA, of Geneva, said he had isolated from tubercular lepra a bacillus which appears to be identical with that of ordinary lepra. Small rods, shorter than the bacillus of tuberculosis were found, whose biological properties are in nowise to be distinguished from those of the lepra bacillus.

DR. KÖBNER, of Berlin, opposed Arning's view that leprosy only shows itself in Europe where old foci of the disease had existed. He would do away with the term tubercular lepra and replace it with that of nodular lepra. He opposes the fish theory of Hutchinson and has carried out experiments by inoculating eels, but without ever succeeding in producing a leprosy disease. As treatment he employs creosote which some have looked upon as a dangerous remedy. To obviate the much dreaded deformity of the nose, he recommends frequent rhinoscopic examination and the application of chloride of zinc to any ulcerations present.

DR. FALCAO, of Lisbon, spoke of lepra in Portugal, where patients are not isolated, do all kinds of work and are admitted into all hospitals, and yet no evidence of transmission is found. He, too, opposes the fish theory of Hutchinson. Gynocardic acid had given the best results.

DR. REDNER has obtained pure cultures in seven days. The double coloration by Ehrlich's Method is not produced.

Transmission by means of cultures has not succeeded, and the speaker thought the disease was not transmissible.

DR. KALINDERU, of Bucharest, believes recent observations tend more and more to prove that contagion plays a most important part in the extension of lepra.

If fish could be a cause of lepra there ought to be many cases on the banks of the Danube where state fish constitutes the chief nourishment. Vaccination has never transmitted leprosy in Roumania. Transmission by heredity seems possible but only to a limited degree. The clinical signs which permit a differential diagnosis of syringomyelia and anæsthetic lepra are as follows:

SYRINGOMYELIA.

Disassociation of sensory troubles. Integrity of the superficial muscles of the face. Absence of spots on the skin. Integrity of the hairy system.

Deviation of the vertical column.

LEPRA.

Abolition of tactile sensibility. Atrophy and paralysis of the superficial muscles of the face. Presence of spots, painless, on the body. Complete or partial loss of hair and excessive alterations in nails.

Thickening of the nerves with nodular swellings. Spontaneous resorption of the phalanges.

In treatment the author uses petroleum in capsules containing a grain or more, of which four to six are given daily, and applies a ten or twenty per cent. petroleum ointment. Isolation should be practiced but in harmony with the sentiments of humanity.

The Forms of Late Syphilis was the title of a paper read by PROFESSOR NEUMANN, of Vienna.

Such constitutional diseases as tuberculosis, malaria, scorbutus, diabetes, Bright's disease and alcoholism favor the outbreak of tertiary symptoms just as do misery, privations, bad climate, and bad treatment. Tertiary syphilis shows itself in 6.82 per cent. of all cases of syphilis according to the statistics of his clinic, and is especially seen in the third year after infection. In general, tertiary syphilis represents a local focus, a residue of the exudations of the early periods. Without doubt chemical alterations take place in the tissues due to vital processes of specific germs and to their products of nutrition (ptomaines). To diagnose syphilis hereditaria tarda, two questions must be settled: 1. Is the history of any worth? 2. Are there objective symptoms which permit this diagnosis, and if so what are they? The first can be answered in the affirmative. The first condition is—that the parents or one of them shall have had syphilis at the time of conception or of gestation and that the heredito-syphilitic child shall have presented no specific phenomena in the first months of life. One could evidently not be certain of these conditions unless one had assisted, in capacity of physician,

at all the various phases of the family life. As to objective symptoms, there is a whole series of characteristic accidents which affect either the entire organism or only a few organs. Among these may be mentioned arrest of development, and especially slight development of chest and genital organs, imperfect bony system, lack of muscular development and slowness of intellect, in other words, a picture to which Fournier has given the name *infantilisme*. No single sign suffices for the diagnosis of tardy syphilis. The tendency to abortion on the part of the mother and the early death of the product of repeated pregnancies are strong points in favor of this diagnosis. If acquired syphilis appears tertiary at the end of a dozen years, why can not syphilis derived from the parent remain latent for a long time and only show positive signs after more or less variable intervals. In a study of the severe forms of syphilis met with in certain places as an endemic disease of peculiar type, the author comes to the conclusion that it is not a disease *sui generis*, but simply tertiary syphilis with here and there a case of syphilis hereditaria tarda interspersed. This is the case in Dalmatia and Bosnia where destructive forms, not commonly met with elsewhere, are observed, and where there is no lack of bodily development to make one think of late hereditary disease. To faulty and insufficient treatment (calomel fumigations given by Charlatans), the author attributes the severity of these cases. Their frequency is due to extra genital infection, through common use of domestic objects, pipes, forks, spoons, glasses, and the popular custom of kissing upon all occasions, together with careless habits and lack of proper nourishment.

Hereditary transmission to succeeding generations, the author says, has not been demonstrated. Instances of transmission from grandparents to grandchildren are not known.

DR. NEISSER opposed Neumann's view that the appearance of tertiary phenomena was brought about by the results of exudation which had remained behind from the secondary period. Such cell-mass remains could only be influenced to new production by the effect of a new irritation, and such irritation can only be sought for in micro-organisms. Finger's opinion that the tertiary appearances are brought about by the chemical products of metabolic change, the speaker held to be unproven. He would do away entirely with the term syphilis hereditaria tarda since, so far as he is aware, no positive observation of an instance of such a form has ever been published.

DR. FINGER opposed Neumann in his statement that tertiary forms occurred where the secondary change had taken place, for were this true we could only have those organs affected in the tertiary which had been involved in the secondary stage.

In closing the discussion Neumann said that in his thirty years of practice he had never seen a case of syphilis hereditaria tarda which really met all the requirements as to the occurrence of tertiary products. Clinical observation taught that syphilis often returned upon such parts as had been either chemically or mechanically irritated. In such location we can often find, even months after a secondary affection, exudation cells about the vessels.

The Different Forms of Infantile Syphilis.—DR. ROMNICIANO (Bucharest) said most cases show themselves between the first and fifth months. Coryza is usually the first symptom.

The manifestations may be divided into three forms :

1. The light form. This is the most frequent. Eruptions upon the skin and mucous membranes up to the sixth or eighth month when they disappear under treatment not to return.

2. The medium form. Here the manifestations recur more frequently, and repeat themselves during several years.

3. The severe form. This is rare. The signs recur more or less frequently up to the age of 14 or 15 years.

Subcutaneous injections are uncertain, give pain, cause abscesses and never in the author's hands lead to cure.

DR. SCHWIMMER does not believe that syphilis can occur in infancy and at a more advanced age without having shown some signs in the first weeks after birth, and when it appears to act in this way it is probable that the early manifestations have been over-looked or wrongly interpreted. His treatment consists in calomel internally associated with opium or sublimate baths.

DR. LANG believes that syphilitic tabes might be considered in a way as the result of the prolonged action of toxins upon the system.

DR. LEWIN regards the disease as a trouble of chemical equilibrium and rejects the intervention of a contagium.

DR. NEISSER believes with Lang that there is a difference between living and dead bacilli, and that their products may be different just as in tuberculosis, the dead bacilli give rise to other products than living ones.

Syphilis of the Heart.—DR. MRACEK (Vienna) read a paper in which he maintained that the syphilitic affections of the heart can be divided into two groups, that in which the lesions are the direct product of the disease and that in which they are the consequence of the development of these products. In the first group is the gumma, and a specific inflammation ending in fibro-sclerous myocarditis. Generally these two forms coexist. The gummata usually occupy the myocardium and usually escape detection during life. The cellular proliferation in fibrous myocardites always appears first in the tissue surrounding vascular ramification.

In regard to the changes which follow the specific lesion it has been found that the gummy new formation replaces a portion of the heart muscle which becomes atrophic, and another portion is included in the mass of syphilitic granulations and with it undergoes a retrograde metamorphosis.

Aneurism may form especially at the apex opposite the left ventricle. The pseudo membranes which develop over the heart may cause adhesion between the two layers of the pericardium. Occasionally the myocardium becomes so thinned that rupture results in sudden death.

Analogy Between Certain Diseases Affecting Leaves and Those Affecting the Human Skin.—DR. LEWIN (Berlin) presented a number of specimens of leaves of the *Maba Abyssinica*, brought from Africa, which showed parasitic affections upon their surface, in some instances resembling the circles of trypanophytosis and in others scabies, etc.

Diseases of the Lymphatics of the Skin from an Anatomico-Pathological Standpoint.—DR. PALTAF (Vienna) says we can distinguish two varieties of mycosis fungoides ; one, the classic form, the other, characterized by the appearance of tumor growth from the very first. After an examination of three cases of fungoid mycosis, the author states that there is present a

tissue rich in cells, coming from the connective tissue, but not of inflammatory origin. This tissue infiltrates only the derma, and after its disappearance the latter is not unchanged. The only micro-organisms found are those of pyæmic infection; hence the author rejects the idea of an infectious growth, and cannot regard it as sarcoma. He classes it as a trouble which owes its characteristics not to a special cause, but to an abnormal reaction of the individual, due to an anomaly of the vegetative function.

Kaposi's pernicious lymphodermia should be considered a variety of mycosis fungoides, with a generalized dermatitis and the production of subcutaneous tumors.

Leucæmia of the Skin.—DR. RIEHL (Vienna).

The few instances of leucæmia of the skin which are known, presented cutaneous tumors in leucæmic subjects. The author distinguishes two forms, one with circumscribed, the other with diffuse tumors; but the histological examination does not permit of a very sharp distinction between the two types. Pseudo-leucæmia permits of two cutaneous varieties, one pruriginous, the other in form of tumors. The leucæmia described by the author, beginning in an eczematous condition, could be confounded with mycosis fungoides or with lymphodermia, but examination of the different organs and of the blood on the one hand, and histological examination of the skin on the other, would suffice to correct the error.

Mycosis Fungoides d'emblée.

The same author observed a case of this rare disease in a man of 47 years, who two years before had nodes develop on the feet and legs, which disappeared, leaving scars behind. Two months ago a new production of tumors began on the right knee and both legs. Hard swellings, one to two centimeters broad, five centimeters long and one centimeter above the skin level, were present, some of which had ulcerated, the ulcers having irregular borders. The rest of the skin is pigmented and shows pale cicatrices. Internal organs and blood were found normal. An extirpated tumor showed all the appearances of mycosis.

On the Erythrodermia of Mycosis Fungoides.—DRS. BESNIER and HAL-LOPEAU (Paris).

Mycotic erythrodermia may be precocious or tardy. It may precede mycosic tumors by a period of several years, or it may follow their development. Ordinarily, it only gradually becomes generalized, and often there remain intervals of sound skin. The redness of the skin coincides with its thickening, exaggeration of its folds and consistence. The eruption may be here and there of papular nature, and have either a hair in the centre of each papule or show a central depression. Pigment spots may be present at the same time. The eruption is always accompanied by severe pruritus. As a consequence of severe scratching, excoriations and ecchymoses appear, and subsequently glandular swellings come on. Like the mycotic tumors, the erythrodermia can retrogress, leaving behind pale spots.

Contribution to the Study of Mycosis Fungoides.—DR. BREDÀ (Padua) related two cases of the disease from which the conclusion is drawn that polymorphous erythema exudativum can complicate it, just as is possible for rheumatism or syphilis. In one of the cases he found anatomical ele-

ments in course of degeneration, which, by their form and reaction toward coloring agents, resembled certain parasites.

Prurigo.—DR. VIDAL (Paris).

Hebra's prurigo belongs to the dermato-neuroses. It is not an independent disease but the result of several pathogenetic influences, the principal of which are nervousness and lymphatic constitution (scrofulous diathesis), although cure is not the rule it is nevertheless not rare. By a well directed treatment which includes protection of the skin against all exciting causes of pruritus we can obtain great amelioration and even long remissions from the symptoms.

DR. GAUCHER agreed that the disease was of lymphatic nature. It can not be regarded as a lichen and is indeed only the prurigo compliqué of the old French writers and has been well described by Cazenave, Devergie and others.

True Trichoma of the Hair.—DR. DE AMICIS (Naples) reported a case of true trichoma of the hair in a girl of nineteen. The distinction between this and the false form, as made by Alibert, must be observed. The true trichoma is an affection *sui generis*, while the other is a simple mechanical and accidental alteration. The condition is one of trophic disturbance of the skin due to a neuropathic origin.

On the Anatomy and Development of Pigment of the Epidermis.—DR. JARISCH (Innsbruck) opposes the view generally held that the pigment cells of the epidermis come from migratory pigment cells. The speaker had studied the development of these cells in the tadpole of toads, the conjunctiva of the ox and in the cells of hairs. Epidermic pigment exists in the frog tadpole before it possess either red blood or skin, and the pigment develops from the exterior toward the interior.

DR. EHRMANN (Vienna), speaking upon the same subject, said he, too, had carried out experiments upon batracians, and had arrived at different conclusions from those of Jarisch. In the first place the frog embryo is not suited for this kind of research because the eggs are already pigmented in the maternal ovary and their pigment forms where the protoplasm is and not in the vitellus. His conclusions are the following:

1. Pigment is not produced in the epidermic layer but in those of the skin (mesoderm) and this only after the formation of blood globules.
2. The pigment is produced from the blood elements, very probably from the coloring matter of the blood.
3. The formation of pigment from the cellular nucleus or from the protoplasm has not been demonstrated. Pigment is produced in the protoplasm but with materials which the latter abstracts from the blood. Pigment may perhaps arise from the vitellus for the latter must contain pre-formed the chemical combinations which the first blood corpuscles do.
4. The pigment is produced in the epidermis by cells having an active motion and by the protoplasmic current.

The Dermato-mycoses in France.—DR. FEULARD (Paris), has found that there is no connection between the frequency of favus and the density of population. It is especially a disease of the country districts and of the very poor. Here we find both danger of contagion from animals and lack of care.

Favus seems to be diminishing in France while alopecia areata has increased enormously, especially in cities and particularly in Paris.

Presence and Localization of Mercury in the System.—DR. LUDWIG (Vienna) described his process of determining the quantity of mercury contained in an organ or in a liquid.

If a liquid is to be tested, powdered oxide of zinc is added, which, by becoming distributed in a uniform manner throughout the fluid, precipitates the mercury, which can be collected and weighed. An infinitesimal quantity can thus be detected.

If an organ is to be tested it must be cut into small pieces, to which are added a twenty per cent. solution of hydrochloric acid and heated for several hours. The mercury vaporized during the heating is collected and condensed in a refrigerating apparatus.

DR. ULLMANN (Vienna) said he had made a study of the mode of distribution of mercury in the different organs, employing the method of Ludwig above given.

In all instances in which mercurial preparations had been given, but especially where injections had been used, he found the greatest quantity of mercury in the kidneys, the liver, the spleen and the intestinal canal.

The large intestine contained the largest and the stomach the smallest quantity. At points where extensive alterations of mucous membrane existed the mercury was most abundant.

In the salivary glands only minute traces of mercury were discoverable, and the saliva contained none at all. Thus salivation due to mercury should only be considered as a reflex phenomena. The brain and the lungs contained traces, and in cases of poisoning, the latter contained much. The quantity in a given organ does not depend so much on its vascularity as upon the affinity of its cells for the metal. Mercury leaves the system through the bile which fluid contains, however, much less than one would suppose. Diseased bone contains more than healthy bone, the latter having scarcely a trace.

Medicinal Eruptions from a Pharmacological Standpoint.—DR. LEWIN (Berlin).

It is now thought that eruptions from drugs are due to alterations of the organic or of the circulating albumin of the body. Two groups are to be distinguished.

1. Eruptions after internal use of a drug shown in some individuals.
2. Eruptions after external use seen in all persons. It is certain that idiosyncrasy plays an important rôle. The idea is rejected that there exists a dynamic influence according to which substances introduced into the system form another body which became toxic.

Psorospermiosis.—DR. BOECK (Christiania) draws the conclusion from his studies of the psorospermiosis question that the presence of sporozoaires in Darian's disease is not as yet proven. The formations described in this disease as sporozoaires, especially the large, rounded bodies, are nothing else than epidermic cells having undergone irregular cornification. Finally, the disease in question offers a certain analogy with seborrhoeic processes, and in both these diseases there exists a tendency to hyperkeratosis.

DR. NEISSER (Breslau) agreed with the author that up to the present

time we possess no criterion for what we should designate by the name psorospermoses. The proof of the psorospermic nature of any disease, has not yet been given.

Molluscum contagiosum is the only disease in which one can suppose with any likelihood that psorosperms exist in the human skin.

Here we have an affection which is not of carcinomatous nature which has its evolution without the participation of vessels or of connective tissue, and the origin of which we must search in the epithelium. Besides, the alterations found have a great analogy with those designated psorospermoses.

DR. TÖRÖK (Budapest) believes the appearances to be due to a colloid substance, the opinion of its being parasitic is only a presumption.

DR. EHRLICH reported three cases of pemphigus vegetans in which these elements have been found. He considers them products of degeneration passing at times into cornified degeneration. He agrees with Neisser concerning molluscum contagiosum.

Treatment of Blennorrhagia.—DR. NEISSER advanced the proposition that all prophylactic and therapeutic measures in blennorrhagia should be based upon the fact that the gonococcus is the sole cause of this disease. Microscopic examination also, especially in women, has absolutely no value.

The gravity of blennorrhagia consists in the facts that:

1. The virus and the alterations which it brings about do not remain localized upon the parts of mucous membranes primarily affected.

2. The virus invades later on the deep layers of the epithelium. This extension permits the disease to persist months and years in inaccessible parts, that is to say, that it may create sources of chronic infection.

Treatment should aim to prevent an anterior urethritis from becoming posterior and an acute case from becoming chronic.

Remedies capable of killing the gonococcus without creating too much inflammation should be used.

Among these are nitrate of silver 1 in 4000 to 1 in 2000, ichthyol one per cent, and corrosive sublimate 1 in 30,000 to 1 in 20,000. Astringents are useless.

Frequent irrigation is thought well of. For practical reasons, in men irrigation should be replaced by syringing with a large syringe. Internal treatment in women is useless, and all treatment is here difficult compared with that of the male.

The frequency of rectal gonorrhœa deserves more attention than it has received.

DR. EHRLICH spoke of urethritis from mixed infection. Here ichthyol is of benefit.

DR. LANG spoke of Medicated Caoutchouc tubes which he has used with success.

DR. WELANDER spoke of the abortive treatment by means of injection of one gram of a two per cent. to three per cent. nitrate-of-silver solution before the discharge has become purulent and before the gonococcus has penetrated the epithelial layer. The superficial layer of epithelium in the anterior part of the urethra is to be previously abraded by introducing a tampon of cotton.

DR. FISCHER had found experimentally that a ten per cent. solution of

nitrate of silver penetrates deeply while a half per cent. solution does not pass the upper layers of the epithelium.

DR. LEWIN said the weak solutions recommended 1 in 4000 do not coagulate the albumin, but an endosmotic action occurs by which they penetrate.

DR. SCHAUTA had observed three cases in which scarcely two months after infection ovarian tumors were discovered of the size of the fist. The gonorrhoeal nature of these tumors was confirmed by bacteriological examination after they were removed. The results of operation are good. In 200 cases the mortality was only three per cent. Death may be caused in such tumors by peritonitis.

DR. HERZFELD spoke of severe suppuration of the uterine annexes which may cause serious disorders and even death. They can only be cured by ablation of the annexes.

(To be concluded)

Book Reviews.

A Practical Treatise on Diseases of the Skin. By JOHN V. SHOEMAKER, A.M., M.D., Professor of Skin and Venereal Diseases in the Medico-Chirurgical College and Hospital of Philadelphia, etc. Second Edition, revised and enlarged, with chromogravure plates and other illustrations. New York : D. Appleton & Co., 1892. Pp. 878.

This book was given a favorable notice in this Journal shortly after its appearance in 1888. That a second edition appears within four years is a subject of congratulation to both author and publisher. During the interval between the time of the first and second edition the book has grown, so that it now has some two hundred and forty-five pages more than before—that is, it has increased in size nearly forty per cent. Indeed, it is practically a new book, every page showing evidence either of revision or re-writing. We notice, under "Physiology of the Skin," new sections upon external temperature of the skin; absorption by the skin; perspiration; electric currents, and odor of the skin. Under "Pathology" we find two new pages devoted to parasites. In the chapter on treatment there are many additions, notably five pages devoted to the consideration of electricity. The sections on seborrhoeic eczema, dermatitis epidemicus, hydrodenitis destruens suppurativa, dermatitis herpetiformis, and acute circumscribed oedema cutis, are new. Lupus, lepra, erysipelas and purpura are nearly twice as long as before. From a book so full as this is, we are surprised to find that both pityriasis rubra pilaris and psorospemosis follicularis cutis, or keratosis follicularis, have been omitted.

The author, in this edition of his book, shows evidence of far wider reading than he did in the former one. This seems to us to be a distinct advantage. His strong point is his therapeutics. Medical men seem to be divided into two classes. The one has great faith in drugs; the other is rather inclined to be skeptical about them. To the former of these classes our author belongs without doubt, and his enthusiasm should prove inspiring and useful to those who are weak in faith. We commend the book to

both the general practitioner, that most useful man, and the special student of dermatology.

The book is gotten up with that neatness and elegance that distinguish all the books issued by the Appletons. We congratulate the public on the fact that nearly all the pictures that marred the first edition of the book have been removed. G. T. J.

Verhandlungen der Deutschen Dermatologischen Gesellschaft. Zweiter und dritter Congress. Im auftrage der Gesellschaft, herausgegeben von Prof. Dr. A. NEISSER, Secretär, Wien und Leipzig: Willhelm Braumüller, 1892. Pp. 419.

This book contains the papers and discussions thereon which were presented before the second and third annual meetings of the German Dermatological Congress.

Among the many papers which appear may be mentioned those by Neisser and Pick, on the Pathology of Eczema, which present an excellent résumé of our knowledge of that subject; a paper by Galewsky, of Dresden, on Pityriasis rubra pilaris, illustrated by a number of remarkably good reproductions of photographs and photo-micrographs; one by Dontreleport on the Pathology and Therapy of Leprosy, and an article on Acne Necrotica by Touton.

The book is printed in a superior manner, and the illustrations are among the best which have appeared in a medical publication.

Items.

The Treatment of Nocturna Incontinence of Urine in Children. DR. VAN TIENHOVEN. (*Allg. Wiener Med. Zeitung*, 1890. No. 50.) This author believes the exciting cause of nocturnal enuresis to be the incomplete closure of the prostatic urethra, during the general muscular relaxation of sleep. The urine collecting in the bladder soon finds its way into the urethral pouch, and gives rise, by its presence, to reflex detrusor spasm.

To overcome this he advises elevation of the pelvis during sleep by means of a wooden frame, which raises the body to an angle of 45 degrees.

In this manner, he affirms, the urine is prevented from entering the posterior segment of the urethra.

Gonorrhœal Cystitis.—DU MESNIL. (*Virchow's Archiv*, Vol. cxxvi., 1891. *British Med. Journal*, February 27, 1892.)

The writer denies that there is such a thing as specific gonorrhœal cystitis. When gonococci are found in the urine, they have, in all probability, entered with urethral pus, and are not new products developed from true specific inflammation of the vesical mucous membrane itself. In women, pus from the urethra or vagina might easily get into the bladder in this manner. Du Mesnil maintains, on the strength of fresh researches, that gonococci cannot alter the composition of the urine, and that cystitis, with ammoniacal urine, is not produced by these germs. Indeed, the urine renders the gonococci harmless or kills them entirely.



Dr. Fordyce's Case of Multiple Benign Cystic
Epithelioma of the Skin



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MULTIPLE BENIGN CYSTIC EPITHELIOMA OF THE SKIN.¹

BY

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THE limited number of cases of this curious affection which have been observed together with its very interesting pathological anatomy have prompted me to present to this Society a report of two cases,—mother and daughter—which have been under my observation for some months.

Daughter's Case.—The case which first came under my care affected a girl 19 years old. She is of German parentage, and has four brothers living, none of whom have any skin trouble.

Her mother, she states, has had an eruption on her face and neck for many years. Her father's skin is free from disease.

The patient is a blond, well developed and of average intelligence. She has always enjoyed good health and has been regular in her menstrual function.

Her mother says that no eruption was present on her skin at birth. As nearly as the mother and daughter can recollect, small pimples were noticed on the left temple and forehead about six years ago. At first they were small, about the size of a pin's head; they have gradually enlarged until many of them have attained the size of a split pea. She thinks during the past two years no increase in the number or size of the tumors

¹ Read before the Sixteenth Annual Meeting of the American Dermatological Association, New London, Conn., September 14, 1892, and the New York Pathological Society, Nov. 23, 1892.

has taken place. Shortly after the outbreak of the disease on the left temple similar papules appeared behind the left ear, then over the face and neck.

The statements of the patient regarding the time the eruption was first noticed as well as the order in which it developed cannot be regarded as strictly accurate.

Present Condition. (See chromo-lithograph.)—Numerous translucent, pearly-looking tumors, from the size of a pin's head to that of a split pea, are seen scattered over the forehead, temples, eyelids, cheeks, nose, behind and below the ears, back of the neck and through the hair. In the interclavicular regions from fifteen to twenty tumors are seen, and a few over the upper portion of the chest. The tumors are grouped on both temples and behind the ears, otherwise disseminated. On the left temple a circle is formed by half a dozen tumors.

In general the growths are discrete; in one or two places, however, masses were formed by the confluence of three or four tumors. They are imbedded in the skin and project beyond its surface. To the touch they are firm and painless; the larger tumors are tense, shiny and are freely movable. The lesions are dome-shaped, flattened and some of the smaller ones acuminate.

A central depression was noted in a number of the growths causing them to simulate very closely the lesions in molluscum contagiosum.

In color the tumors differ little from that of the surrounding skin; the smaller ones are a trifle darker while the stretching of the epidermis by their growth imparts a shiny appearance to the larger ones.

A few of the lesions presented a pale yellow tint, not sufficiently pronounced, however, as to suggest xanthoma.

The pearly translucent appearance of many of the tumors, caused them on casual examination to simulate vesicles, so that I was led to puncture one of them for fluid. The puncture was followed by slight bleeding only and revealed a solid formation.

The majority of the larger growths were covered with minute capillaries and intermingled with the lesions telangiectases and black pigment spots were found.

Scattered among the smaller translucent lesions a great number of white papules of the same size and shape as the characteristic lesions of the affection were noted, which differed in no respect from the ordinary milia. Many of the larger tumors also contained one or more white bodies like milia. The mucous membranes were normal.

The patient's face has an oily appearance; she perspires freely.

Mother's Case.—At my suggestion the mother of the patient presented herself for my inspection.

At first glance the identity of the eruption in the two cases was evident. (See Fig. 1 in text.)

In size, appearance, and general distribution the lesions were almost the counterparts of those on the daughter's face. She stated that her attention was first attracted to the eruption when she was about 15 years old. Her father had a group of tumors like those on her daughter's temple, and in the same locality, she recollects that they were always present and that no attempt was made to remove them. In her own case the tumors have increased in number from year to year. She experiences no inconvenience from them except a slight itching during the summer. At the inner angle of the right eye a large semi-translucent looking tumor containing a number of white milium-like bodies and covered with dilated capillaries is present. This tumor is about the size of two peas, double the size of any other growth on her own or her daughter's face. She thinks this lesion has grown during the past year. The other tumors with the exception of one below and to the right of the outer angle of the mouth are of pretty uniform size.

The eruption extends over the forehead, face, auricles, the anterior, lateral, and posterior aspects of the neck, and over the upper portions of the back and chest and has existed for over 30 years.

Numerous telangiectases are present over the cheeks and a few comedones are scattered here and there over the face. The clinical description of the eruption in the daughter's case applies equally well to the mother's.

As a similar eruption had never presented itself to me it was not possible to arrive at a diagnosis unaided by the microscope. Dysidrosis was readily excluded by the absence of fluid in the lesions. Hydradenoma (Darier), adenoma sebaceum, and colloid milium suggested themselves to me as possible diagnoses.

Histology.—For microscopic examination six tumors were excised from the face and back, placed for half-an-hour in a corrosive-sublimate solution and afterwards hardened in alcohol.

Sections were cut in celloidin, and stained with hæmatoxylin, safranin, and borax-carmin. Under low amplification or with the naked eye the derma is seen to contain a number of irregularly rounded, oval, and elongated masses which take a



Fig. 1.

deeper stain than the surrounding tissue. In some sections these cell masses are quite distinct while in others they intercommunicate in the most remarkable manner. These masses extend from just beneath the epidermis to, in some cases, the region of the coil glands. (See Plate, Figs. 1 and 2.) With moderate enlargement the resemblance which these cell heaps bear to an adenoma is very striking, suggesting at once the case described by Perry as an adenoma of the sweat glands and apparently justifying the name *hydradenoma*, given to this affection by some of the first observers. With stronger amplification these darkly stained masses are seen to consist of epithelial cells hav-

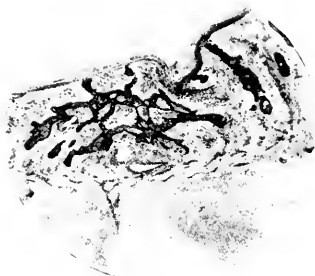


Fig. 2.

ATYPICAL EPITHELIAL CELL PROLIFERATION IN
LUPUS ERYTHEMATOSUS.

ing the same appearance as the cells in the lower layers of the epidermis. They are inclosed in connective tissue which has undergone considerable thickening and condensation.

While in some of the sections the epithelial cells are densely packed together without a distinct structure, in others they are made up of tracts two or more cells wide, which are twisted and intermingled among themselves in the most complicated way. (See Plate, Fig. 2.) Linear tracts, two or more cells wide, ramify throughout the derma, connecting the cell masses and occurring independent of them; the narrower ones closely resemble coil-gland ducts although no distinct lumen can be made out. The tracts are not well shown in the photographs, but they are a

noticeable feature of many of the sections, recalling the atypical cell proliferation in true epithelioma and in sections from a case of lupus erythematosus which I prepared from a patient of Dr. Piffard. (See Fig. 2 in text.) The downgrowth and proliferation of epithelium seen in that case is of the same character and appearance as in the case which I am describing, and presented such an unusual departure from the histology of lupus erythematosus, that it is introduced here for comparison and to show that identical histological appearances may accom-

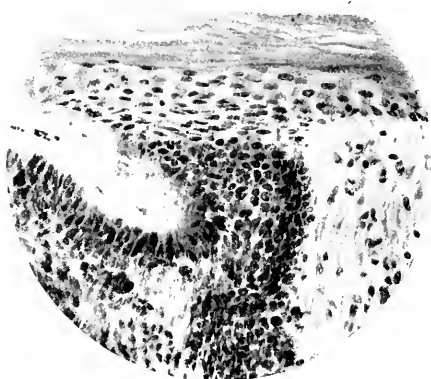


Fig. 3.

ENLARGED VIEW OF AN EPITHELIAL DOWNGROWTH FROM FIG. 2, SHOWING THE CHARACTER OF THE CELLS. (PHOTO-MICROGRAPH BY DR. PIFFARD, SPENCER 1 $\frac{1}{2}$ IN. X 300.)

pany so widely dissimilar processes. Figure 3 in the text, an enlarged view from the same section, as in Fig. 2, shows the character and origin of the cells from the basal layer of the epidermis.

While the cell masses in the sections from some of the tumors are composed almost exclusively of densely packed epithelial cells, in other tumors the intricately intertwined bands and tracts predominate in their formation.

In other tumors, again, these cell heaps are more compli-

ated in their structure and show the "pearls" and cell "nests" of malignant epitheliomata. These cell nests are seen in all stages of development—centrically arranged and nucleated cells which show no horny degeneration, well defined imbricating horny cells (see Plate, Fig. 4), stratified corneous tissue and amorphous matter with here and there a stained nucleus present.

Cysts are seen surrounded by laminated cells containing kerato-hyaline enclosing dark brown or almost black granular pigment and detritus (see Plate Fig. 5), or entirely empty.

While in many of the sections the individual cells in the masses take the stain with equal facility, in others the centrally located cells are much paler in color or show only a few nuclei or imperfectly stained cells. (Plate, Fig. 7.)

Again the cell tracts are so arranged as to form an alveolar like structure enclosing nuclei and such lightly stained cells that a high power is necessary to reveal their presence. The walls of the alveoli, however, instead of being made up of fibrous tissue consists of epithelial cells so arranged as to resemble the columnar cells of a cylindroma. The striking resemblance which some of these cell masses bears to glandular tissue is well shown in Figure 6 of the plate. In one of my preparations it is difficult to resist the belief that an abortive attempt at the formation of a sweat gland was present, for a distinct lumen containing no nuclei or degenerated cells can readily be seen surrounded by regularly arranged cylindrical-like cells. The absence of an external limiting membrane is, however, opposed to the view that the structure is glandular.

In addition to the cysts lined with stratified epithelium containing corneous matter and debris included in the cell masses, identical cysts are found occurring in the connective tissue apparently unconnected with other structures. Small cysts with homogeneous contents were noted in the cell collections probably produced by the degeneration (colloid) of single cells.

The colloid degeneration seemed, in the tumors examined by me, to be confined to the centrally located cells in the cell masses rather than to the epithelial nests. These latter structures contained almost exclusively corneous tissue and dark granular pigment.

A few large cavities were noted throughout some of the sections surrounded by condensed connective tissue from which the cell contents had been detached probably in the methods of preparation.

Sections from the first tumors examined by me failed to show any connection between the new growth and the epidermis or glandular appendages. Further investigation, however, of the tumors in which a central depression was macroscopically visible revealed a direct downgrowth and proliferation of the epidermis and also of the external root sheath of the hair follicle. (See Plate Figs. 1 and 3.) In these preparations the proliferated basal layer of the epidermis can be seen forming



Fig. 4.

SECTION FROM RODENT ULCER OF THE FACE, SHOWING MASSES OF EPITHELIAL CELLS RESEMBLING THOSE MET WITH IN BENIGN EPITHELIOMA. (PHOTOMICROGRAPH BY DR. PIFFARD, GUNDELACH, 1 $\frac{1}{2}$ IN. X 50.)

the peripherally situated cells of the masses and retaining the same palisade arrangement of the cells as in normal epidermis.

The bands, tracts and alveolar like structures of the cell heaps are evidently the result of a proliferation of this layer, while the horny masses represent the physiological tendency of the epidermis to form cornuus tissue.

The cell heaps in many sections approach the hair follicles so closely that the hair is deflected from its normal course. In

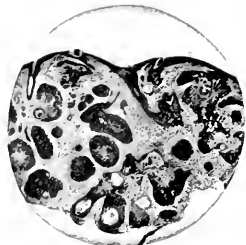


Fig. 1

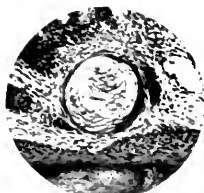


Fig. 4

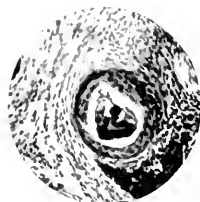


Fig.



Fig. 2



Fig. 3

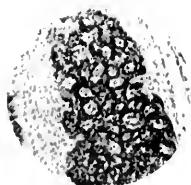


Fig. 6

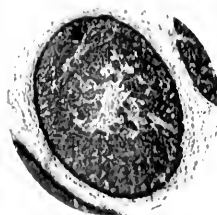


Fig. 7

Fig. 1 a direct out-growth from the external root sheath of the hair can be seen. Numerous sebaceous glands were observed throughout the sections which were in every respect quite normal and independent of the cell groups described. Normal coil glands and ducts were seen in a few of the sections; they were, however, less numerous than in an equal number of sections from normal skin, while in some of the tumors none were found.

The accompanying photo-micrograph from a section of rodent ulcer is introduced at this place to show the intimate resemblance which the epithelial processes in this affection bear to those of the disease under consideration. (See Fig. 4 in text.) A cut representing the clinical appearance of the lesion from which this section was taken can be found in Dr. Piffard's *Elementary Treatise on Diseases of the Skin*, page 101.

While it has been the almost universal custom to regard such histological appearances as seen in my case as pathognomonic of malignant epithelioma the clinical appearance and natural history of the affection differ widely from the classical epithelial new growths. We are compelled to enlarge the conception which attaches to the term epithelioma or to search for a more appropriate designation for this disease.

The few cases which have been observed and investigated are the following:

Jacquet and Darier in 1887 under the title of *Hydradénomes éruptifs*, describe the case of a young man aged 26, in the service of M. Besnier, whose chest and arms were the seat of a number of small tumors varying in size from a pin's head to a small pea. The first appearance of these tumors was noted when the patient was eight years old.

From a histological standpoint Darier looked upon the growths as epithelial adenomata originating in the sweat glands or briefly hydradenoma with colloid cysts.

Darier subsequently abandoned the theory which regarded the tumor as glandular in origin in favor of the view which is now held by Jacquet, to be referred to later on.

Török in 1889, carefully examined a similar case affecting a man aged 33, on whom the tumors had existed for fifteen or sixteen years.

The result of his microscopic examination yielded quite analogous results to Darier's, although he interprets his observations differently. While Darier believed that the normal sweat glands had proliferated in such a manner as to form the tumors,

Török thinks that they developed from misplaced embryonic germs of these glands which failed to develop in a normal manner. As reasons for this belief he refers to the fact that few sweat ducts are found in the affected area, and also that the coils beneath the tumors are correspondingly diminished in number.

The presence of the cysts and cell masses in the middle region of the corium leads him to believe that they are formed from cells originally destined to develop into sweat glands, but which were cut off from the surface epidermis and prevented from descending to the normal depth of the coils. He furthermore found cysts in the *arrectores pilorum* which he believes could only have found their way there in fetal life.

The limitation of the cell masses to the middle area of the corium was noted in a number of the tumors examined in my own case while the diminished number of coil glands in the lower dermal region was a noteworthy feature. The direct origin of many of the cell masses from the surface epidermis and the hair follicles with their formation of horny tissue is opposed, however, to Török's theory unless we have to do with a complex process affecting both the indifferent epidermic cells and those destined to form sweat glands.

Quinquand and Jacquet at the International Dermatological Congress held in Paris in 1889, each presented a case of this interesting disease.

Quinquand proposed the name "Eruptive cystic epithelial celluloma" for the affection, while Jacquet preferred to call the neoplasm "Benign cystic epithelioma of the skin."

Both of these cases were acknowledged to be identical with those previously reported.

These authors deny the relationship of the new growth to the sweat glands; they look upon it as developed from embryonic epithelial germs of indifferent nature misplaced during fetal life and remaining in a latent condition until excited by some influence into active proliferation.

This view is also adopted by Philippson who has at Unna's clinic observed and investigated a fifth case of the disease and studied its relationship to colloid milium (Wagner) and colloid degeneration of the skin (Besnier). He concludes that this affection and colloid milium are identical, and that "anatomically they belong to the class of benign epitheliomata with colloid degeneration and arise from embryonic epithelial germs in the cutis."

The case described by Philipppson is without doubt identical with the others quoted and with my own, but his attempt to prove its identity to colloid degeneration of the skin seems to have signally failed, for Besnier¹ who is familiar with the clinical appearances of both affections denies their relationship, and quotes Balzar, who made the microscopic examination in his original case² of colloid degeneration of the skin, and who has since compared its pathological anatomy with that of benign epithelioma, as saying that it never occurred to him to attempt to establish a relationship between the two affections.

It is highly probable that many of the milia usually met with are of the same nature and have a similar origin to that of the tumors under consideration. One of the smallest papules met with in my patient having the exact appearance of a milium was excised and examined. It was composed of a single collection of epidermic cells, of the same character as in the larger growths and surrounded by thickened connective tissue.

This origin of milia from embryonic deposits in the cutis has been referred to by Robinson,³ Epstein and later by Philipppson (*loc. cit.*). The colloid degeneration of the skin first described by Besnier and Balzar, however, is a colloid degeneration of the connective tissue and vessels of the derma which may spontaneously disappear while the benign epitheliomata have never been observed to do so.

Perrin⁴ recently investigated a case of colloid degeneration of the skin and found substantially the same lesions as in the original case of Besnier's.

The case described by Perry as an adenoma of the sweat glands and so beautifully shown in the chromo-lithograph accompanying his article, is undoubtedly identical with the other cases of benign epithelioma although his histological description is too brief to be satisfactory on conclusion.

It is now generally believed that the affection described by Kaposi⁵ under the name *Lymphangioma tuberosum multiplex* is at least clinically and probably in all respects the same disease as benign epithelioma.

¹ Pathologie et Traitement des Maladies de la Peau, par Kaposi. Traduction par Basnier et Doyon. II Edition française, Tome II p. 368.

² Sur un cas de dégénération colloïde du derme, par M. Ernest Besnier. *Annales de Dermatologie et de Syphilographie*. Tome X, 461.

³ Manual of Dermatology, 1885, p. 73.

⁴ Colloid Degeneration of the skin. Second International Dermatological Congress, held in Vienna, 1892.

⁵ Pathologie und Therapie der Hautkrankheiten. Dritte Auflage, 1887, page 742.

Hoggan¹ first denied the correctness of Kaposi's anatomical description and Besnier (*loc. cit.*), Török² Jacquet and others have made out a strong case in favor of the view that Kaposi's disease is in reality one of benign epithelioma.

The case described by Lesser and Beneke³ as one of *lymphangioma tuberosum multiplex* has been identified by Dr. Lukaszewicz,⁴ Professor Kaposi's assistant, as an example of the disease, described by Kaposi under that name. Beneke who made the anatomical investigation of Lesser's case regarded it as more closely allied to an endothelioma than a lymphangioma, although because of the pronounced development of the lymphatic capillaries he preferred to retain Kaposi's original name.

Török⁵ and Philippsson⁶ in criticising this case hold strongly to the opinion that it was a true case of benign epithelioma.

The case of congenital adenoma sebaceum⁷ described by Pringle is, according to that author's description and opinion, closely allied in origin and clinical appearance to "hydradenoma" representing an analogous condition of the sebaceous glands.

A differential diagnosis of the two affections seems to be impossible without invoking the aid of the microscope, for the telangiectases regarded by Perry as peculiar to adenoma sebaceum were also found present in my case.

As nearly as I am able to form an opinion from the cases quoted by Pringle, from Balzar, Vidal and Hallopeau there seems to be as good reasons for regarding them as examples of benign epithelioma as of adenoma sebaceum.

It is quite probable that the two diseases may have an analogous origin in foetal life, for as all the appendages of the skin are formed by the ingrowth of the deep cells of the stratum Malpighii during foetal development, it is rational to conceive that under the influence of certain conditions not understood,

¹ On multiple lymphatic naevi of the skin, and their relation to some kindred diseases of the lymphatics, Plate XVI. *Journal of Anatomy and Physiology*, Vol. XVIII. p. 304.

² *Annales de Dermatologie*, 1891, No. 2. *Monatshäfte für prakt. Dermat.* Bd. XIV. 1892, page 184.

³ Ein Fall von Lymphangiosum tuberosum multiplex (Kaposi), *Virchow's Archives*, Heft 1, 1891, page 86.

⁴ *Archiv für Dermatologie u. Syph.*, 1892, I.

⁵ *Monatshäfte für prakt. Dermat.* Bd. XII, No. 6, 1891. *Ibid.* Bd. XIV, No. 5, 1892, page 184.

⁶ *Ibid.* Bd. XII, No. 5, 1891.

⁷ *British Journal of Dermatology*, January, 1890.

at one time cells destined to form sweat glands, at another those intended for the formation of sebaceous glands, and again those of an indifferent nature, might be cut off from the germinal layer or retain their embryonic nature until brought into activity through some influence during the development of the individual.

It is a noteworthy fact that the majority if not all of the few cases reported, appeared about the age of puberty when we would expect the skin and its glandular appendages to take on increased activity.

After the foregoing portion of my paper had been prepared and read at the last meeting of the American Dermatological Association I received the September number of the *British Journal of Dermatology* containing Dr. Brooke's most excellent article which covers essentially the same ground as I had gone over independently.

By a curious coincidence three of his cases occurred in one family, affecting a mother and her two daughters. The lesions in these cases as in my own affected principally the face.

In the time the tumors appeared, their clinical behaviour, and in their anatomical structure, Brooke's cases are identical with my own. They differ, however, from the other reported cases in their apparent hereditary origin, in affecting chiefly the face, and from the fact that anatomically a connection was traced between the tumor elements and the overlying epidermis. This histological difference from the other cases is not inconsistent, as stated by Brooke, with their supposed embryonic origin.

Clinical Course.—As stated previously the tumors appear about the age of puberty and increase slowly in size until they attain the size of a split pea. Their surface remains quite smooth, and neither ulceration nor spontaneous involution have been observed. No impairment of the general health results; nor do the growths give rise to any subjective sensations. The entire course of the affection is so free from any evidence of malignancy that the word benign seems an especially happy one to qualify the term epithelioma which custom has associated with malignancy.

The clinical course of rodent ulcer is so different from that of the classical epithelioma that many writers hesitate to class it with that growth, and now that atypical epithelial proliferation is not confined to malignant tumors their position is still further strengthened. The use of epithelioma molluscum for molluscum

contagiosum affords a precedent for enlarging the meaning of epithelioma, and no valid argument can be brought forward against the use of that term for this affection which is so clearly demonstrated to be of an epithelial nature. A question which has suggested itself to me and to others is what is the dividing line between the benign and malignant epitheliomata? Should a parasitic element be demonstrated in the malignant disease, this question might be readily answered.

Treatment.—Up to this time no application or internal medication has met with any success in removing the growths. I have succeeded in removing the majority of the larger tumors in my case by means of the dermal curette and have expressed some of the smaller ones with Dr. Fox's comedo extractor. They are loosely attached to the surrounding tissues and when the epidermis is broken are readily separated. The little wound which is left readily heals with a slightly depressed scar.

EXPLANATION OF THE PLATE.

Fig. 1. Section of the nodule from the face showing the depression of the surface of the skin and the general arrangement of the cell masses in the cutis. At the extreme right of the section a downgrowth of the surface epidermis is seen while to the left of this a proliferation from the hair follicle is visible. Wales 1 in. No ocular— $\times 25$.

Fig. 2 represents a section through a nodule from the back showing the cell masses surrounded by condensed connective tissue. Here the collection of cells is composed of inter-communicating tracts which simulate with a low power hypertrophied glandular tissue. Wales 1 in. No ocular— $\times 25$.

Fig. 3. A more highly magnified view from the right of Fig. 1 showing the origin of the new growth from the epidermis. Zeiss apochromatic 16mm. Projection ocular 4— $\times 60$.

Fig. 4 shows a cell "nest" consisting of imbricating horny cells surrounded by compressed nucleated cells. Zeiss apochromatic 4mm. Projection ocular 4— $\times 250$.

Fig. 5 represents a similar appearance to Fig. 4. The contents of the cyst, however, are dark amorphous granular matter. Zeiss 4mm. Projection ocular 4— $\times 250$.

Fig. 6 shows the cylindroma-like arrangement of the epithelial tracts enclosing more faintly colored cells. Zeiss 4mm. Projection ocular 2— $\times 125$.

Fig. 7. A collection of cells with central (colloid) degeneration. The peripherally situated cells are arranged as in the basal layer of the epidermis. Zeiss 8mm. Projection ocular 4— $\times 125$.

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PERINEAL OPERATIONS ON THE PROSTATE, WITH A BRIEF REPORT OF A NEW METHOD OF REMOVING THE LATERAL LOBES.¹

BY

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IN considering the subject of perineal operations on the prostate, the writer is aware of the difficulty of defining the definite limitations and application of this method.

Regarding the prime object of an operation to be the removal of mechanical obstructions to urination, an object of scarcely less immediate importance is bladder rest and drainage. The latter are of such importance and the condition of many prostaties is so serious, that an exploratory incision, which will temporarily defunctionate the bladder, is not infrequently all that can be contemplated. This procedure is often an invaluable preliminary to the removal of mechanical obstructions contemplated by the more radical operation, and its consideration cannot well be omitted in this connection. For the purposes of rest and drainage it will perhaps be generally conceded that the perineal incision is easily and generally safely performed and accomplishes, at least temporarily, the ends sought, in a fairly satisfactory degree. Clinical observation has repeatedly demonstrated that the benefit following bladder rest thus obtained is more or less permanent in many cases, particularly when stretching the prostatic urethra accompanies perineal incision. It is evident that if the prostatic urethra has greatly increased in length, and that there is a consequent increase in the so-

¹ Read during the discussion of the general subject of prostatectomy at the Sixth Annual Meeting of the American Association of Genito-Urinary Surgeons, Ritchfield Springs, New York, June 21, 1892.

called "perineal distance," that the perineal incision would not be the one of selection in efforts at radical removal of prostatic obstructions. McGill states that inability to reach and explore the bladder exists in about thirty per cent. of all cases. Whether this estimate is accurate or not, it must be conceded that the length of the prostatic urethra is often so increased that an effort to remove obstructing tissue by an opening through the membranous urethra is attended with great and often insurmountable obstacles. While it is to be conceded that such cases are best suited for suprapubic incision, it is certainly desirable to exhaust the possibilities of usefulness of the perineal incision in view of its lower death rate, and the fact that consent to suprapubic operation is not always easily obtained. The mechanical indications which are usually of value as guides in determining which method of operation is suitable for an individual case, are the increased length of the prostatic urethra, as indicated by measurement by catheter from the meatus to the point where urine is obtained, and the size of the rectal tumor, as shown by digital examination.

In fourteen cases, two of which were by combined suprapubic and perineal incision, and twelve by perineal incision, the writer has observed that where there was a large rectal tumor it was in each instance associated with an elongated prostatic urethra and a consequent increased perineal distance, and its attendant difficulty in making examination about the vesical orifice and inside the bladder.

No great difficulty was experienced in introducing the finger into the bladder in cases where a rectal tumor was absent, or where it was small. Whatever views may be entertained in other respects, mechanical questions are certainly of primary importance from an operative standpoint. It is well-known that small protrusions of thickened mucous and muscular tissue, constitute in many cases the chief impediment to urination. They may present at any point, in front, behind, or on either side of the opening of the urethra into the bladder, or they may be located, in whole or part, within the bladder or within the prostatic canal. If such obstructions are not associated with considerable enlargement of the lateral lobes, their accessibility by perineal incision is sufficiently simplified to generally make their removal or destruction possible.

Two specimens are here presented of lateral enlargement removed through a perineal opening. So far as the writer is aware no effort has heretofore been made to enucleate the lat-

eral lobes thrupeoh a rineal incision. The specimen marked 1 is from a patient aged 70. The patient had been wholly dependent on catheter six months prior to operation. His condition was not favorable and a simple perineal opening was contemplated for drainage, with a view of subsequently doing a suprapubic prostatectomy. Upon introducing the finger into the prostatic canal, a nodular and somewhat corrugated condition of the canal was noticeable. This condition of the channel was observed in several cases where the rectal tumor was large. One sharp, hard projection on the right side of the vesical orifice was particularly marked, and the temptation to accomplish its removal was so great, that a long, straight bistuary was placed along the finger and a superficial incision was made through the mucous and muscular covering of the growth. The two first fingers of the left hand were then introduced into the rectum, and with the index finger of the right hand in the perineal opening, the mucous and muscular covering was peeled back and the hypertrophied masses shown in the specimen were enucleated. Counter pressure in the rectum greatly facilitated their removal. In this case the obstruction was more marked on the right side, and no effort was made to remove the enlarged left lobe. Very little difficulty was experienced in removing with the finger the nodular masses shown in the specimens. The patient from whom the right lobe was removed had restoration of bladder function without residual urine as soon as the drainage tube was removed some six weeks after the operation.

The specimen marked No. 2 (specimens shown) is from a patient aged seventy-three, in which both the right and left lobes were removed. (This case is No. 9 of the twelve reported in a paper read before this Society last year.) The operation was undertaken for the removal of three or four soft stones, and the removal of the lateral lobes was incidental to the former. The patient also had restoration of bladder function, and did well for a time, but death occurred some four months afterwards from a pyelo-nephritis.

Immediate diminution in the size of the rectal tumor was noticeable in both these cases.

The larger piece in the specimen No. 1 measnres three inches in its long circumference, and the entire specimen weighs 200 grains. There are three large and five small pieces.

The larger piece in specimen No. 2 measures two and three-fourths inches in its circumference and the total weight of the

specimen is 350 grains. There are six pieces of this specimen. It will be observed that all the pieces of specimen No. 2 are round and apparently have separate points of development. Before removal they were clustered together and presented as a nodular mass.

The removal of lateral obstruction by this method seems to possess the advantage over Dittel's operation of giving an opportunity for examination of the prostatic urethra and vesical orifice, and affords bladder drainage subsequent to the operation. It also seems to suggest the danger of marring the integrity of the prostatic urethra.

Of the twelve cases in which the writer has made a perineal without a suprapubic incision, nine have recovered with complete restoration of bladder function. One was not benefited by the operation and two died. Of the two where combined suprapubic and perineal incision was made one died from shock and one made a perfect recovery.

If one may presume to formulate any suggestions as to the indications favoring perineal incision, it would appear that the lower death rate as shown by Belfield's statistics would favor the perineal opening. First—In cases where the condition of the patient is such as to imperatively demand the least possible shock; Second—In cases where there is not great elongation of the prostatic urethra as determined in the manner above suggested. The mechanical value of a perineal incision, however, would appear to chiefly obtain in cases not associated with great elongation of the prostatic urethra and in the division of removal of portions of so called prostatic bars or collar shaped growths, and for the removal of median or other growths about the vesical orifice or within the prostatic canal. It may perhaps also answer in certain cases for the removal of the lateral lobes if experience does not show this to be injurious to the canal.

The writer, in a paper upon this subject, at the last meeting of this Society, referred to the advantage he had obtained by the use of a small Ferguson speculum, both for intra-vesical and intra-urethral inspection, and to a limited extent for the removal of small growths about the vesical orifice, and in the prostatic urethra with the galvano-cautery. Subsequent experience with this method has been insufficient to extend the limits of its application, or to say more of its use than was then said.

LEPROPHOBIA.

BY

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THE name and idea of *syphilophobia* are familiar to all the readers of this Journal. Who has not met with such patients, conscious either of a former syphilitic infection, or perhaps only of having exposed themselves to such danger, who limit their circle of ideas to this subject, and continually hunt for or discover symptoms of syphilis in themselves? A similar condition is frequently met with in patients affected with gonorrhœa, even when there are no more symptoms to be found than a little increase of the ordinary mucons secretions which is certainly quite harmless. By representing such a state as very serious, undertaking to cure it, and perchance failing after a prolonged treatment, a physician may add to the large number of sexual hypochondriacs.

We do not ignore that such mental conditions are often due to a decided psychical disturbance, and therefore persuasion may entirely fail; but often such ideas have not yet become completely fixed, and the existing hypochondriacal disposition need not manifest itself without special opportunities. A certain literature, exaggerating the dangers of the results of sexual diseases and bad habits, has to answer in a great measure for the number of such unfortunates, but too much specialistic treatment may also occasionally contribute to it. The physician ought to consider it his duty where he observes disposition to hypochondria, not to encourage and foster it by entering too much into the views of the patient.

If this disposition of a patient to take a tragic view of his slightest sufferings cannot be overcome, the physician ought to watch him as much as possible, and eventually warn his relations, for it is not uncommon that such patients prove by attempts at self-destruction, how intensely the mental equilibrium has been disturbed. There is no doubt that many of these people ought to be isolated and treated for mental affliction but it is often impossible to make others share this view.

In the course of my practice in South America, as well as in the Hawaiian Islands, I have frequently met with people in whom a hypochondriacal disposition has taken the turn of a perpetual fear of being affected with leprosy, a condition which

I propose to design "*Leprophobia*." In some of these cases the patient suffers himself to be persuaded that his fears are groundless and harmful to himself, if the physician not only has his confidence, but also speaks in a decided tone. If he hesitates, because he does not feel confident as to the non-existence of the disease, he will often do more harm than good. In some other cases the patient will not be convinced, but will go on spending his money by consulting physician after physician till he finds some one to enter into his views. I remember such a case in a young Chinese, in whom careful examinations, repeated after long intervals, never revealed anything abnormal with the exception of a little acne and spasmodic contractions of the fibrillæ of some of the muscles.

In *leprophobia* also the first impulse has generally been given by certain printed descriptions, principally those furnished by the sensational daily press, sometimes by the amply discussed history of some unfortunate. In other cases, *leprophobia* arises from the consciousness of having been in more or less intimate contact with persons afterwards discovered to be affected with the disease.

There are a good many causes which contribute to make leprophobia more serious than other analogous states of mind. The now almost general and much exaggerated belief in the contagiousness of leprosy, as well as the accepted, though hardly proved possibility of a very long incubation; finally the comparative ignorance in which we are concerning the form and the period, in which the first manifestations might be expected—all these together make it difficult to absolutely deny the possibility of an already existing infection. The first manifestations being partly of a more subjective nature, a patient who has gathered some information, may not only fancy that he feels certain symptoms, but will eventually describe them so accurately and vividly that any physician not very familiar with that matter, may be easily deceived. Leprosy not only being of far more serious character, but also held in quite peculiar dread, any mistake, nay even incertitude in diagnosis, may have the most serious consequences. I have seen a number of people making themselves and others miserable by believing that they were affected with leprosy, though no symptoms could be discovered by repeated examinations. It is always good to make these examinations several times, as the first manifestations of leprosy are often transitory, but it must be done in a way which will comfort the patient and not alarm him. The

physician ought to keep any suspicion he may have for himself, until he has positive evidence, and as long as such is absent, I consider him not only justified in reassuring the patient, but bound so to do.

The physician should bear in mind that :—

1. The heredity of leprosy is not proved.
2. The danger of passing connection with lepers is exceedingly slight, and perhaps exists only in more advanced stages of the disease.
3. Contagion even by intimate and prolonged contact is by no means frequent in families living in a civilized way and in easy circumstances.

4. Apparently sound people may present unsuspected symptoms of leprosy which could easily be recognized by an experienced physician, while the existence of a prolonged symptomless period of incubation is not proved beyond any doubt.

Therefore I consider it an act of humanity to combat all these unproved and exaggerated statements which, while tending to spread leprophobia, do no real good and often lead to opinions and measures quite unworthy of an enlightened age.

Society Transactions.

SECOND INTERNATIONAL CONGRESS OF DERMATOLOGY AND SYPHILOLOGY.

HELD IN VIENNA, SEPTEMBER 5TH TO 10TH, 1892.

(Continued from page 457.)

Cysticercus of the Skin.—DR. PERRIN (Marseilles) reported the co-existence in a man of cysticerci of the skin and *tania solium* apparently due to auto-contamination.

In all previous observations, with one exception, cysticercus in the human species has been considered as coming from cysticercus in the pig, which, in reality, is nothing else than the scolex of the *tania solium*.

Treatment of Disseminated Nodules of Lupus.—DR. DUBREUILH (Bordeaux) finds that when nodules persist and recur, often showing but slightly on the surface compared for the amount of diseased tissue deeper down, scarification does not do so well as seraping with small enrettes specially constructed and operated with a boring motion. In this way the deep tying

nodules and prolongations of softened tissue can be sought out and removed. After the scraping has been thoroughly done a caustic solution of chloride of zinc should be applied by means of a small brush.

Lupus Erythematosus.—DR. MALCOM MORRIS (London) believes that erythematosus lupus is an inflammatory affection belonging to the group erythema and having no necessary relation with any specific micro-organism. It depends primarily on disturbance of the local circulation brought about by external agencies, heat, cold, or by nervous trouble, and an acute inflammation can then develop through the intervention of some microbe. To avoid confusion the term atrophying erythema is suggested to replace the older name.

DR. VIEL (Cronstadt) does not believe in the tuberculous nature of the disease. Out of 119 cases only five died of tuberculosis. Histology shows only a chronic inflammation starting in the papillary bodies.

No local treatment should be instituted during the acute stage. Two of his patients had been much benefited by a sojourn in the mountains.

DR. BOECK (Christiania) believes it to exist in association with tuberculosis while not being itself a local tuberculosis.

DR. SCHIFF (Vienna) had seen lupus erythematosus patients succumb to tuberculosis. Still two forms should be recognized; the acute and the chronic. Some cases are not at all influenced by any treatment while others recover spontaneously. The latter class should be called, as Morris had suggested, atrophying erythema.

Rodent Ulcer.—DR. DUBREUILH (Bordeaux), said there existed among the superficial epitheliomas a variety which the English call rodent ulcer, which would seem to be a disease entirely special and distinct from epithelioma. In the region of the nose especially it may cause deep ulceration. There is no suppuration nor outlying lesions on the skin or mucous membranes as in syphilis or lupus. It is simply an ulcerative process which destroys all the tissues in the same manner and to the same depth. There is no resemblance to a tumor or other vestige of neoplasm excepting the hardened peripheric margin and the tissue of new formation which covers the surface of the ulcer. It usually occurs primarily near the internal angle of the eye, upon the nose or forehead. It is observed in subjects of ripe or old age, the general health is never altered. There is never ganglionic involvement, generalization or recurrence at a distance. Recurrences in situ are, however, the rule after incomplete operation. It is never transformed into malignant growth no matter to what irritation it is exposed. Still in a period of from ten to twenty years it may involve and destroy the whole face. It is a small-celled epithelioma, the cells being grouped into rounded or angular lobules. These cells are very small and indistinct, do not undergo keratinization and never form epidermic globes. The appearance of the lesion as well as its ulcerating and nodular character make it readily confounded with lupus or tertiary syphilis.

Colloid Degeneration of the Derma.—DR. PERRIN (Marseilles) related the history of a woman 54 years of age who for eight or ten years had been troubled with a skin disease affecting the upper part of the face and the backs of the hands as far as the knuckles. The skin over the regions includ-

ing the upper part of the nose and the cheeks was noticeably thickened, had a bronzed color and had scattered over it small bright elevations resembling vesicles in so far as aspect was concerned, for they were really solid bodies. This affection was absolutely torpid and indolent. Patient died in the hospital of pulmonary congestion. Histological examination showed colloid degeneration of the connective tissue of the derma situated in its middle portion, and giving rise to refracting masses of homogeneous appearance, separated from the epidermis by a thin dermic layer and from one another by the excretory ducts of the sweat glands and hair follicles.

These colloid masses are the result of condensation of the connective fibres, thickened and degenerated. The epithelial elements of the sweat and sebaceous glands as well as of the hairs are intact, but their connective tissue is often thickened and occasionally have undergone colloid degeneration. The vessels of the hypoderm as well as the derma are much changed, their calibre is diminished and the external connective tissue sheaths of the nerves are thicker than normal, the condition is attributed to nutrition acting upon the connective elements of the skin; troubles favored by external conditions and especially by continued congestions of the skin under the influence of solar radiation.

Psorosperms and Cancer.—DR. TÖRÖK (Budapest), considers that the sporozoaires of cancer hitherto described, are the products of degeneration of the nucleus or of the cell, of the normal or altered migratory cells of the blood. He has observed in different forms of chromatic degeneration that the nucleus enclosed rounded spherical or fusiform bodies which colored intensely and after disappearance of the enveloping membrane mixed freely with the pale or brilliant cells of cancer.

Other psoroformic products result from the swelling-up of certain cancer cells in consequence of various conditions, (hyaline transformation, hydropic degeneration).

The author thinks the sporocysts which have been described are derived from altered epidermic globes and giant cells.

Spyrokolon.—DR. JOANA (Athens) spoke of syphilis in Greece and of the special form which has received the name spyrokolon. Citations were made to show that syphilis was known to the ancient Greeks.

At the present day it is benign because,

1. Of the dread in which the disease has always been held.
2. The early period at which treatment is sought.
3. The patience with which treatment is continued.
4. The absence of alcoholic excesses.
5. The heat of the climate.

Spyrokolon is what is termed elsewhere mucous patches about the arms. It is localized about the arms and genitals under the form of exanthem and papules. It was imported by the Turks at the beginning of the century and is supposed to occur without other primary lesions. Later on gummata form and nasal and bone disease follow. In 1835 this form became epidemic in certain towns. A common habit of one mother nursing a neighbor's child is regarded as a probable cause of the spread of syphilis in Greece.

Albuminuria in Syphilis.—DR. SCHWIMMER (Budapest), says the kidney is frequently affected in syphilis and nephritis as well as gummata are produced. In 250 subjects—the primary or secondary periods of syphilis—only three instances of albuminuria were discovered. During treatment twenty-two became albuminurics but the albumin disappeared again while patients were in hospital. From this the deduction is drawn that mercury in the blood produces an irritation of the kidneys without our being able to hold the mercurial treatment responsible for the albuminuria.

DR. JANOVSKI (Prague), has the urine of his syphilitics examined from time to time and often finds albumin coinciding with the eruption and febrile action, and as morphological elements are lacking he is inclined to admit a febrile albuminuria.

DR. MRACEK, held that mild cases of albuminuria had no importance for the clinician; under mercurial inunctions large quantities of albumin may be passed. He believes mercury may enter into combination with salts and irritate the renal parenchyma.

Sarcomatous Tumors and Tuberculous Lymphangitis.—DRS. HALLOPEAU and JEANSELME (Paris) believe there can develop on the course of lymphatics, sarcomatous tumors which offer in their clinical characters and evolution the greatest analogies with nodules of lymphangitis. They also develop in the lymphatic glands. When they ulcerate there is excessive hemorrhage due to invasion and destruction of the vascular wall of the neoplasm and this may serve to distinguish them from tubercular lymphangitis with ulceration.

Atypical Psoriasis.—DR. ROSENTHAL (Berlin).

Positive inoculations from man to man are rare in psoriasis. The first manifestations appeared sixteen days after the first attempt at inoculation.

The author has neither seen nor found in literature positive evidence of direct contamination. He had also failed to find any evidence of a vasomotor neurosis or any predominance of nervous symptoms. Psoriasis is often associated with albuminuria but only accidentally. Psoriasis attacks the scalp most frequently and rarely the palms and soles, while the elbows and knees are generally implicated. Heredity has been made out rarely by the author, who thinks the predisposition is acquired.

The mucous membranes are rarely attacked. Neumann's psoriasis nigra must be attributed to uncleanliness.

Itching is among the first of the subjective symptoms. Eczema and seborrhea, are among the most frequent complications. Psoriasis may appear after therapeutic irritation. It may become transformed into eczema and vice versa. Scleroderma and lichen ruber are remarkable complications. Atypical cases require special treatment based on concomitant symptoms.

The Penetration of Ointments.—DR. AUBERT (Lyons) addressed a note to the Congress upon the penetrating properties of ointments through the skin. To study the question he incorporated atropine with the various substances and then, causing the subjects to exercise, collected and examined the sweat.

When the application is made by simple unction oils and lard penetrate best, while vaseline, cerate and lanoline penetrate scarcely at all.

When the application is made with the aid of brisk rubbing it is found that lanoline does best, because, by reason of its stickiness, friction always produces some erosions or causes some hairs to be pulled out, and thus favors absorption.

Pemphigus Neonatorum and Puerperal Pemphigus.—DR. STAUB (Posen) believes that pemphigus of the new born results most frequently from an intra-*puerperal* infection. The participation of the mother in the infective process is shown by *puerperal* manifestations at times severe and at times slight, while occasionally she herself has a *puerperal* pemphigus along with other disturbances. Two such instances were related, in which a quite severe *pyemic* *puerperal* fever was accompanied by a pemphigus eruption while the child was the subject of a typical pemphigus *neonatorum*. Both recovered in the first instance, but in the second the child perished.

The speaker believed the cause of infection was often to be attributed to the midwife.

Pruriginous Dermatoses and Forms of Lichen.—DR. BROcq (Paris) took up those skin diseases intimately associated with pruritus as a prominent symptom, and gave a general description of the lesions in pruriginous neurotic dermatoses. Here two kinds of eruption are found; one characteristic, as for example the papule of lichen ruber; the other, of such an indistinct nature as to permit of its being a symptom in a variety of different affections.

Lichenoid Eruptions.—In the original meaning of the term lichen, the only affections to which it is applicable are primary lichenifications, either diffuse or circumscribed. Now by the designation lichenifications the speaker understands such a morbid process as is brought about by continued traumatic action resulting in chronic inflammation of the skin and infiltration of the derma. The natural lines of the skin become exaggerated, while the suppleness is lost. There is hypertrophy of the papillae which may become aggregated and take on the appearance of papules. Modifications of these changes may exist and when not so marked, but where the skin has assumed a dirty brown hue the condition is termed "abortive lichenification." Lichenification may originate spontaneously either in apparent health or upon a skin already occupied by a dermatosis.

Secondary lichenifications are spoken of which are simply lichenified dermatoses and not true lichens.

The key to the difficulties surrounding the lichen question, the speaker believes, lies in the fact that too much importance has been given to lichenification arising spontaneously, and that a wrong interpretation has been put on its coincident existence with eczema and other affections.

Eczematization as applied by Besnier to certain eczematous eruptions indicates only a special mode of reaction of the system under certain exciting causes. It may be combined in the same individual with lichenification or other morbid process.

Urticarial Eruptions are common forms of pruriginous affections in which must be included Vidal's acute lichen simplex consisting of small reddish papules or papulo-vesicles.

Often in the very beginning of a pruriginous neurotic dermatosis all that can be noticed is a peculiar condition of the system which has been termed *nercosism*. This by gradual progression and particular effect upon the skin produces a dermatosis.

Violent emotion, moral shock, sorrow, or whatever increases the *nercosism* may determine the eruption.

The cutaneous manifestations of this state may be regular, as in menstrual pruritus, irregular as in that of gouty subjects, or it may be permanent.

Generalized and localized neurodermiae are described, and *chronic circumscribed neurodermitis* is the name given to the diseases corresponding to the circumscribed lichens of the old writers and to Vidal's chronic lichen simplex.

Eight groups are made of the author's conception of the pruriginous neurotic dermatosis, the distinction between which rests mainly on the different modes of reaction of the skin. We cannot here give a synopsis of these groups which have been made, the author states, in the hope that subsequent work in this field will be facilitated by them.

Spontaneous Cheloid.—DR. BERLINER (Aix-la-Chapelle) related an instance of cheloid occurring after the extirpation of a small tubercle. Examination showed it to be secondary to an acne-like eruption.

The Treatment of Gonorrhœa.—DR. ISAAC (Berlin) objects to the use of the syringe because it always irritates the canal, and by the force of the stream the gonococci are carried deeper in. Sublimite cannot be employed because it irritates the canal. In the first two weeks only general measures should be employed. Cusper's sound and antrophores are condemned. In posterior urethritis the speaker had secured best results with ointments such as 2% salicylic introduced with Thompson's syringe.

DR. KÜBNER (Berlin) spoke in favor of dropping the terms gonorrhœa and gonococcus and employing in their stead only blennorrhœa and blennococcus.

Favus and Alopecia Areata in France.—DR. FEULARD (Paris) reviewed the question of favus and ringworm in France between the years 1887 and 1892, and finds that the former has diminished in frequency, while the latter has increased, especially in the large cities. The number of soldiers afflicted in the army for a period of ten months amounted to 1,734, or an average of 3.30 per 1,000. The most rigorous measures are insisted upon to prevent a continuance of the increase of cases noted for the past few years.

DR. NEUMANN said favus was rare in Austria, being more frequent in Galicia than elsewhere. Among Mussulmans the disease extends not only to the whole scalp, but to the whole external integument. He attributes the spread to the custom of shaving the head two or three times a year and the constant wearing of turban or fez.

Quantitative Modifications of the Blood Elements in Syphilis.—DR. KONRIED (Vienna) finds that previous works on blood changes in syphilis lack scientific base. Examinations have now been made into the composition of the blood in the first stage of syphilis; during the course of treatment, during the secondary period, and in syphilitics untreated. The pro-

portion of hemoglobine, one of the principal elements of the blood, is of great importance. From the very beginning of syphilis it is found diminished in the proportion of twenty per cent. This condition is noticed from the third to the seventh week. Under the influence of treatment the proportion of hemoglobine increases, but very slowly regains its normal color. In some cases of light syphilis, left without treatment, the hemoglobine acted in the same manner, and the proportions increased with the disappearance of the florid symptoms. In tertiary syphilis symptoms of grave alteration in the blood are noted. The number of leucocytes, however, is so variable that no well defined conclusion can be drawn. However, morphological changes are very noticeable. It may be deduced that syphilis is an affection of the blood, this explains the very severe anemia provoked by it at times. Syphilis should be looked upon as an etiological factor in pernicious anemia as important as it is an etiological factor in *tubercularis*.

Morphological Alterations of the Blood in Syphilis and some Dermatoses.

—DR. RILLE (Vienna). Mononuclear elements having an ovoid nucleus which can be colored with aniline form in the medulla of bones and in the spleen, and present several transition forms. Their metamorphosis takes place in the mass of the blood. In many cachexias, and more particularly in syphilis, an arrest of this metamorphosis takes place. Leucocytes of large size having usually two nuclei which are colored by aniline, possess a protoplasm filled with granulations which eosin colors intensely. From five to six of these are found to the hundred in the blood but their number increases notably in many diseases. Medullary cellules, which are very large leucocytes with a large nucleus form in the marrow of bones and are characteristic of leucemia while being also found in hæmorrhagic variola. Finally there are the fatty cells. Red corpuscles with nuclei are found in foetal blood, but are replaced in the seventh month by corpuscles without nuclei. They may be met with in infancy and in adult life too, but only in pathological conditions of severe type such as leucemia, pernicious anemia and severe hæmorrhages. In pernicious anemia megaloblasts are found. Besides these there are normoblasts and microblasts. In the beginning of syphilis we generally find no morphological changes. It is only when gland swellings occur that an increase in the leucocytes appear and especially in the stage of papular exanthem. An increase in the transition forms is found and in the large leucocytes having one nucleus. In some cases too, medullary cellules are discovered. Recurrences of syphilis give rise to the same alterations.

In tertiary syphilis the changes are still greater. In gummata the mononuclear cellules are much increased. In eczema, pemphigus, and prurigo the number of eosinophile cells is increased as well as the fatty cells. In lupus vulgaris the composition of the blood is normal. In variola there is increase of leucocytes.

In closing the Congress it was voted on motion of Dr. Hutchinson that the third congress be held in London in September, 1895.

On motion of Dr. Malcolm Morris, Dr. Hutchinson was elected President by acclamation.

Dr. Kaposi then made a closing address and the Congress adjourned.

The social features of the meeting reflected the greatest credit upon those having the arrangements in charge and all brought away most agreeable recollections of their stay in the Austrian Capital.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

SIXTEENTH ANNUAL MEETING.

(Continued from page 448.)

Discussion on Alopecia Areata.—Each member participating in the discussion was asked to answer the following questions :

- (1) Are there two forms of alopecia : one parasitic, and one neuropathic ?
- (2) Is there sufficient evidence to prove the contagious nature of the disease ?
- (3) Does arsenic or any other internal remedy influence the course of the disease ?
- (4) What is the comparative value of carbolic acid and of other topical remedies ?
- (5) Will epilation of the margin of the patch prevent its spread ?
- (6) What circumstances influence the prognosis of the disease ?

DR. J. C. WHITE did not favor making any such two divisions of alopecia areata, for he thought there were other etiological relations which should be included. He had no personal evidence to offer as to the presence of a parasite in this affection, but other observers had presented data on this point which were worthy of consideration, even though they were insufficient to settle the matter. The larger part of the evidence, however, is wholly unreliable. He was equally unable to gather from his own experience proofs of its neuropathic origin, and he was of the opinion that in the vast majority of cases of this disease there was no ground for ascribing to it any such origin.

As he had stated at the last meeting, had he been asked a year or two before regarding the contagious nature of alopecia, he would have replied that he had never seen any cases which seemed to bear out positively this view, but more recently his experience had been somewhat different. He had met with, previously, four or five cases in which the affection has occurred simultaneously in more than one member of a family, where it was possible that the disease had been communicated by toilet articles. But the Association would also recall that he had then reported the simultaneous occurrence of the disease in all but five or six of sixty children in one asylum. It would be difficult to explain the occurrence of such an epidemic, on any other theory than that of contagion. The only room for doubt is in regard to these cases being examples of true alopecia areata. They certainly could not be considered typical ones, for they differed from the ordinary form chiefly in the following particulars : most of the patches, instead of being circular, were irregular and angular ; the hair fell more rapidly than is usual with individual patches of alopecia areata—i. e., instead of occurring throughout a series of weeks or months, one patch coming and another succeeding it, until, by blending together, they gradually

denuded the whole surface of the head, many of the patches, in this instance, appeared simultaneously, and as many as fifty spots would make their appearance within a fortnight. Dr. J. T. Bowen had carefully examined the cases, but had failed to find any parasitic growth. Notwithstanding that these cases point towards the contagious nature of the affection, the negative evidence is very strong, as it is a disease of very frequent occurrence.

He had never administered arsenic in more than half a dozen of these cases, and he saw no reason to expect that it would control the disease. He believed in no specific treatment: the only indication for internal treatment is to restore any portion of the general economy whose vitality has become impaired.

He had never employed carbolic acid in concentrated form, and, in fact, he seldom prescribed it except in combination with other stimulating remedies. After trying a great many topical remedies, he had come to look upon a mixture of croton oil, one drachm, with oil of turpentine, one-half to one pint, according to the delicacy of the skin, as the best agent for local treatment. This mixture is intensely stimulating, and acts directly upon the vessels, more particularly those surrounding the follicles, thus exciting the circulation and sending an increased supply of nutriment to the tissues most in need of it. Since the last meeting he had experimented with the essence of cinnamon, which had been highly extolled by some French writers and practitioners of dermatology. He had employed this new remedy in about twenty cases, old and new, on a portion of the affected part, using other and better known remedies on the neighboring diseased areas. He did not think that the results which he had obtained differed materially from those which would have followed the use of other mild stimulants, and he was certain it was not as beneficial as the croton oil mixture. Moreover, it produces a more mild and more generalized dermatitis than croton oil; in other words, its action cannot be confined to the follicles.

Regarding the value of epilation at the margin of the patch, he had no opinion to offer.

He replied to the last question by saying that the prognosis was largely influenced by the age of the patient and the duration of the disease.

Dr. G. H. Fox said that he had notes of twenty-eight cases, fourteen of them in private practice, which he had examined very carefully and subjected to experimentation. He would not read these notes in detail, but only give his impression founded upon them. First, as regards the *forms* of alopecia, Up to a year ago he had been skeptical concerning the parasitic form, having in mind the typical smooth, white, ivory-like patch denuded of hair, which we commonly meet with, but closer examination during the past twelve months had revealed astonishing differences in the cases presented. In some cases the hair falls suddenly, leaving the smooth white patches denuded of hair; in others, there is a gradual falling of the hair, some of the long hairs remaining in the centre of the patch. The majority of the patches are white, but some of those which are developing present a congested appearance.

He believed that in many cases, alopecia is secondary. Thus, years ago, he saw in dispensary practice, a large patch of typical ringworm on the head, with short, stubby hair, which, after a very short time, was converted into a perfectly typical alopecia. Only a few days ago, a gentleman had come to

him with a few spots on the scalp and close examination showed that each patch developed at a point where there was redness and slight scaling, and in fact, most of the patches were about the size of a quarter of a dollar, and were red. During the past year he had seen one case in which the hairs seemed to grow in again before the other hair had entirely fallen out, so that at no time was there complete baldness. The speaker thought he had also seen alopecia follow eczematous conditions of the head, and in one case it followed close upon an undoubted case of zoster. This case had also been seen by two of the members present. No one would hesitate about making a diagnosis of alopecia in these cases, and yet the follicles were filled up, and differed from what is ordinarily observed in this condition. Such cases might be termed parasitic. He believed that the majority of cases of alopecia, even those following upon ringworm, are really of neuropathic origin, by which is meant, that they follow nervous changes, and develop in the same way as leucoderma. He had no evidence to offer as to its contagious nature, and some of the cases which had been advanced in support of this view, were quite probably too hastily observed. Thus, a young man had recently come to him with this affection, claiming that it first developed shortly after he went to camp out with a friend having a small bald spot. Further examination, however, showed that this friend did not have alopecia areata, but an ordinary baldness of the vertex, and cross-examination led the patient to recall that he had had these patches for one or two weeks before going to camp.

Neither had the speaker collected any evidence from his own experience bearing upon the value of arsenic or other internal remedies, except that in a general way it may be said that all remedies tending to improve the general health, are exceedingly helpful in the treatment of this affection. The larger proportion of these cases were usually associated with marked nervous derangement, and he was so thoroughly impressed with the fact that alopecia is almost invariably an indication of impaired health, that he would be very much surprised to see it in an athlete, or anyone in perfect physical condition.

Although he had thought that at times he had seen some improvement follow the use of carbolic acid, he did not believe that it was more beneficial than any other equally powerful stimulant. He had treated one side of the scalp with carbolic acid, but had not observed that the hair grew on that side more rapidly than on the untreated side; in short, his experience did not bear out the claims made for it by Dr. Bulkley and others.

While he had seen the disease spread in spite of epilation at the margin of the patch, he believed it was an admirable method of treatment, and one which should be generally adopted. He had noticed in some instances that when the hairs were first loosened on one side of the patch, that side would be distinctly tender on pressure, and that when these hairs are removed, and all treatment withheld, this tenderness of the margin disappears. He thought that epilation of the margin diminished the spread of the disease, even if it did not always succeed in preventing its further growth.

DR. P. A. MORROW said that his observations of alopecia during the past year had failed to advance his knowledge of this affection. Regarding the first question, he thought we had all seen cases of alopecia areata resulting from traumatic nerve lesions. Certainly numerous well-authenticated cases of this kind are on record, but probably nine-tenths of all cases

of disease are of parasitic origin. So many, and such well-authenticated reports have been published of epidemics in schools and convents, and barracks, that there can be no doubt left concerning the contagious nature of this disease, which would naturally imply a parasitic origin. Personally, he had not been able, except in one instance, to distinctly trace the contagion. In this case, the sister of a gentleman whom he was treating for alopecia areata, came home for a week's vacation, and during this time was accustomed to wear her brother's cap. Three or four weeks later, the disease developed in her scalp. Allusion had been made to the transformation of ringworm into alopecia. Crocker holds that it almost exclusively originated in this way, but this theory the speaker did not consider tenable. Some time ago, he had taken occasion to look up the subject of the analogies between leucoderma and alopecia, and had found that such analogies were so exceptional as to afford no presumptive proof even that alopecia areata was of neuropathic character. He had taken special interest in the subject at that time, because he had then under his care a person affected with alopecia of the entire body. This patient also had a distinct leucodermatous spot on the back of the neck, which developed at about the same time as the alopecia. This would have seemed to indicate that the alopecia was likewise of neuropathic origin, had it not been that the contagion was definitely traced to her brother. He was disposed to think that behind and beneath this parasitic element there is a neuropathic tendency—a state of impaired innervation, which results in the formation of a favorable soil for the development of the parasite. He believed that many individuals are inapt for the development of this form of parasitic disease, just as many skins are inapt for the development of chromophytosis. In fact, the clinical aspect and course of the disease would suggest the presence of a neuropathic element, and this factor undoubtedly acts as predisposing cause.

In reply to the third question, he would say that he had had no experience with arsenic given internally for this condition, and therefore, had no opinion to express, founded on experience, but theoretically, he would expect no benefit from arsenic.

After Dr. Bulkley's ardent advocacy of carbolic acid, he had been persuaded to try it in a number of cases, but he had obtained no better and possibly not such good results as had followed the application of other stimulating remedies, and it was decidedly objectionable on account of the pain produced by the application, and also on account of the subsequent desquamation. He had experimented with various other remedies—among them, pyrozone—and while in one case he had obtained what he considered at the time to be a brilliant result, further experience did not fulfill his expectations, and he doubted if it were in any way superior to other remedies. He did not believe that any agent possessed a specific action, the effect depending upon the degree of stimulation, and the method of application.

He invariably practiced epilation of the margin, and with good results. While this practice does not always check the spread of the disease, it has a tendency in this direction. Regarding the prognosis, he had nothing to add to what had been said.

DR. J. N. HYDE said that he had examined his records of cases of alopecia areata from January, 1886, to August, 1892. There was a total of thirty-seven cases, and the majority of those which were followed, were found to have done well. Four exhibited the generalized form of the disease, and none of

these showed, at any time the slightest improvement; all except one case of the four were in the male sex, and in individuals passed the middle period of life; five occurred in the families of physicians. No two occurred in the same family, none reported a transference of the disease, and none had taken any precautions against such an accident: none of those having scalp lesions had previously had syphilis. In a small proportion of cases, there was some concurrent disease of the skin. In one case, that of a young woman who had indulged too freely in athletics, the onset of the skin disease was coincident with the cessation of the menses; complete amenorrhœa lasted for eight months, and was relieved only when the hair began to grow. Many of his patients gave a history of neurasthenia, and exhibited unmistakable evidences of this condition. Twelve cases gave a history of traumatism at some previous time, and four had deeply attached scars on the scalp, but in none of these did the alopecia immediately follow the traumatism. In one of these cases, there was an interval of more than two years, and when the hair began to fall, the patient suffered from atrocious neuralgias. In six instances, where the disease was limited to the beard, all had had syphilis, but the syphilitic infection had occurred from two to four years before. Those having it in the region of the beard gave no history pointing to infection. In one case, there was also vitiligo affecting the hairs of the scalp, beard, and chin.

Referring to the special questions for discussion, the speaker objected to the question limiting the forms of the disease to two. He did not think that any member of the Association would look upon a group of vesicles or a bald spot as a disease, but only as a disease symptom, or a reaction on the skin indicative of some disturbance of the economy. One interesting point which should not be lost sight of is, that in almost all of the parasitic diseases, manifesting themselves on the surface of the body by loss of hair, the new hair is *normal*. The loss of hair in alopecia areata might be explained by the presence of a parasite, but how can we explain by this theory that large proportion of cases in which the new growth of hair is thin, slender, and white? He had no evidence taken from his own experience, bearing upon the next two questions. He had made some use of carbolic acid during the past year, comparing its action on well defined patches with other similar patches not so treated, and had come to the conclusion that where it did prove beneficial, the improvement could not be attributed to any specific action, but only to its stimulating property.

He had practiced epilation, and believed it useful, but it was difficult to say whether the arrest of the disease was due to the epilation, or was a part of the natural course of the disease in that individual case.

The speaker expressed his surprise that the question of prognosis had received so little attention in the discussion, for there were circumstances which strongly influenced the prognosis. Among these, none perhaps was more potent than age, the disease usually running a very favorable course in young people, while it was very intractable in those past the middle period of life. One of the previous speakers had spoken of the almost constant association of alopecia areata with a more or less depreciated condition of the general health. In this connection, it was not uninteresting to recall the fact that he had seen one of these hopeless cases of general alopecia in the person of a Western farmer, past middle life, who presented every evidence of being in the most vigorous health. Experience had taught him to be

cautious about giving a prognosis where large and spreading patches of alopecia areata associated with a milky white hue of the skin, were found in slender, neurasthenic girls of from twelve to fifteen years of age.

DR. H. G. PIFFARD said that he believed he was the first to raise the question of the dual nature of this disease, and in doing so, he had stated that he felt warranted in certain cases in positively asserting that the disease was of neuropathic origin, but that in the majority of instances, he was unable to satisfy himself as to which class the case belonged. There was undoubtedly a congestive form, or possibly a congestive stage which he was inclined to believe occurred in the so-called parasitic class. He said "so-called," because there was no direct evidence of parasiticism, though there was strong circumstantial evidence in favor of the majority of cases of alopecia areata being of parasitic origin.

For many years, he had entertained the belief that this disease was contagious. He was not aware that arsenic or any other internal remedy had any direct or specific influence upon either form of alopecia areata. He believed the comparative value of topical remedies was in direct ratio to their severity. He had tried carbolic acid, a ten per cent. solution of iodine in collodion, and a caustic solution of peroxide of hydrogen, all with good results, but for years he had made use in preference to these more recent ones, of the ordinary blistering collodion.

The practice of epilating the margins had been in vogue for many years, it had been practiced in the Hôpital St. Louis, twenty-five or thirty years ago, and while he was accustomed to practice it, and thought it tended to exert a beneficial influence on the disease, the fact that he used it in conjunction with other measures, prevented him from expressing a more positive opinion.

The prognosis, as regards the restoration of the hair, he considered less favorable in proportion to the extent of the disease, and its duration, but as regards confining it within existing limits, the prognosis was quite favorable. The ease with which the disease can be checked depends largely upon its duration previous to the time of beginning treatment.

DR. F. J. SHEPHERD said that he had only seen one or two cases of this disease in women for several years. He had recently observed it in a coal-heaver who was in robust health, and also in a delicate man of highly nervous temperament. He was not disposed at present to express any opinion as to its contagious nature. The theory that alopecia followed ring-worm was first promulgated by Hutchinson, and in order to study this point, the speaker had made it a practice to question his patients in regard to a previous history of ringworm, but so far, always with a negative result. He had employed carbolic acid for years, but could not say that it was any better than other stimulating applications. He had no experience to offer in regard to the administration of arsenic in these cases, but it would certainly seem to be indicated if we hold to a neuropathic origin of the disease. The prognosis was certainly much better in children than in adults.

DR. H. W. STELWAGON said that if we were to understand by alopecia areata an alopecia occurring primarily, at least in well defined areas with practically no other symptoms except the baldness, then it would seem impossible to escape the conclusion that there were, etiologically considered, two forms of the disease, neuropathic and parasitic. The neurotic origin in certain cases, as for example those due directly to accidents and other

nervous shocks, is beyond question, as they are not uncommon in the experience of us all. Many careful observers, moreover, although meeting with a large number of cases of the disease, have failed to see it occur in any manner that would lead them to consider it of parasitic or contagious origin. Personally he had never met with two cases in one family, nor any case that could be traced to contagion. An observation of others as well as his own was that vitiligo, a disease of neurotic nature is occasionally seen associated with it. Judged by such experience the disease would seem to have but one probable cause, the neurotic. On the other hand, such competent observers as Besnier, Hallopeau, Hillier, and others have reported epidemics of the disease, which just as certainly point toward a parasitic or contagious source. This latter testimony, it seemed to him, could not be ignored because it did not agree with his own, and an assumption that a mistake in diagnosis had been made in a disease whose clinical symptoms are so plain and characteristic, is inadmissible. Such collective evidence therefore would show that alopecia areata, whether viewed as a disease or a condition, may be dependent upon either a neurotic or parasitic cause.

He had been accustomed to give arsenic as a routine measure, probably partly at first owing to his association with Dr. Duhring, who so strongly advocated its use; but aside from this, admitting the neuropathic origin of the disease, there would seem to be no drug which is so likely to favorably influence the course of the disease as arsenic. That this drug is capable of influencing nerve action is shown by the fact that its continued use will sometimes produce marked pigmentation; that it will occasionally provoke a herpes zoster; and that it is often curative.

Regarding local applications, he was of the opinion that a choice of remedy was in great measure immaterial provided the one selected was sufficiently stimulating; that the effect of such local remedies as tar, sulphur, chrysarobin, and carbolic acid would be equal if their stimulating action were equal. After listening at the last year's meeting to Dr. Bulkley's paper on the subject, he had returned home and begun the use of carbolic acid on two inveterate cases which had been under his observation for one or two years. Results from its use were no more positive than from other active remedies and there were some very decided objections to it. Prominent among these was the intense pain often produced by the application. Dilute carbolic acid may be a superficial local anæsthetic, but pure carbolic acid is far from having this property. It first causes momentary pain, then there is a period of partial or complete local anæsthesia lasting from ten minutes to half an hour; this is followed by almost intolerable pain which lasts from an hour to half a day. Another disagreeable property of the application is the possibility of a toxic action. It is true there was no trouble from this cause when the applications were limited at one sitting to an area not exceeding two inches square, but when the area so treated exceeded three inches square, the patient complained of dizziness and nausea and upon rising would be of uncertain gait; these symptoms were more severe when the application was made to an area about four inches square, as he incautiously had done on two or three occasions. These patients were both strong women, and the symptoms were alike in each. For these reasons he should hesitate to employ this remedy to any great extent, and would consider it unsafe in children; and would limit its application to an area not exceeding two inches square.

He had never practiced epilation of the margins of the patch, and could not, therefore, express himself as to its value. Regarding the prognosis, he was surprised (as Dr. Hyde had likewise remarked), that so little emphasis had been laid upon the age of the patient, for this was really the most important factor. In patients under thirty, there was every prospect of recovery, but after forty or forty-five years, he had seldom observed complete cure if the disease was at all pronounced. In cases of general alopecia areata the prognosis is exceedingly unfavorable, and in long neglected cases, exhibiting more or less atrophy of the glandular structures from disuse, the prognosis is likewise unfavorable.

DR. M. B. HARTZELL thought there was little doubt that there were two forms of alopecia areata, etiologically, if not clinically, distinct, but the evidence in favor of traumatism as a cause is not so convincing, for, in the reported cases which have been supposed to indicate such an origin, the disease has made its appearance too long after the receipt of the injury. He had seen ringworm of the scalp succeeded by an alopecia. In one of these cases there were two undoubted patches of *tinea tonsurans*, yet when he saw the child again after an interval of two or three months, these identical spots were indistinguishable from ordinary alopecia areata. In another case, occurring in a child thirteen years of age, there was a small area on the vertex which was indistinguishable from ordinary alopecia areata, and in the same family there had been three or four cases of ringworm of the scalp. We must admit that at least in some cases, alopecia areata is contagious.

The speaker said that he had given arsenic in very many cases, but could not recall a single one in which it seemed to have exerted any beneficial influence.

As it is not uncommon for the disease to run a comparatively rapid course, and for the hair to return, it is very difficult to determine how much treatment affects the course of the disease. The prognosis is greatly influenced by the age of the patient, young persons usually getting well, except those who are the subject of the so-called malignant form in which a large part of the body is affected, in which case, the prognosis is extremely unfavorable.

DR. J. T. BOWEN said that he wished chiefly to endorse and emphasize what had been said by Dr. White with regard to the epidemic in the institution for girls. The whole number in the asylum was sixty-five of which sixty were affected. There could be no question of *tinea trichophytina*, as apart from the absence of all clinical appearances of the latter affection, repeated microscopical examination of a large number of cases failed to detect the presence of the parasitic growth. Taken as a whole he could not distinguish these cases from the ordinary alopecia areata, although they differed somewhat from one another individually. If all recognized as do the French writers, the existence of epidemics of this description, then we must admit that alopecia areata is sometimes contagious; or, at least, that epidemics of an affection that cannot be distinguished clinically from it occur, which it is impossible to explain in any other way than by the theory that they are contagious. Any one observing this epidemic closely, as had the speaker, could not fail to sympathize with the warmth with which Besnier criticises Kaposi's dictum that alopecia areata is certainly not contagious, as well as the comment of other German writers that the epidemics observed in France were probably cases of *tinea tonsurans* which was not recognized.

This epidemic was reported in full by Dr. C. P. Putnam before the Pediatric Society and has just been published in the Archives of Pediatrics.

Dr. R. B. MORISON had had no personal experience bearing upon the parasitic or neuropathic origin of alopecia areata. He did not employ arsenic, partly because he had never seen any beneficial effect from it, and partly because most cases coming to him, had already been liberally dosed with it. In saying this, he did not wish to be understood as underrating the importance of internal medication when there was a definite constitutional condition indicating such a course of treatment. He had abandoned carbolic acid, and returned to the treatment which he employed for ringworm, viz: the application of a strong blister, which was done by painting the edges of the patch with the following:

R Hydrarg. Bichlor.	gr. v
Acid. Salicyl.	dr. j
Collodii	oz. j.

During the few hours that the blister is forming, there is of course considerable pain. After the blistering, the patch was treated with salicylate of mercury and lanoline. The results from this method of treatment had been very satisfactory. He had found no special benefit from epilation. While admitting that age largely influenced the prognosis, he recalled the case of an apparently healthy young woman, eighteen years old, who had been perfectly bald for five years before coming to him. Such a case, of course, justified a very unfavorable prognosis.

Dr. F. B. GREENOUGH said that up to quite recently, he had regarded alopecia areata as parasitic, but not necessarily contagious. These two facts are not necessarily antagonistic, for it is perfectly conceivable that the parasite only develops where it happens to find a suitable nidus. Recently, however, so many well observed cases have been reported, in which a neuropathic origin is claimed, that he felt disposed to accept this theory as applicable to certain of these cases, even though he had personally never seen any evidence pointing in this direction. Dr. Hyde had spoken about the new hair usually being of a lighter color; in his experience, this only occurred in a comparatively small proportion of cases. The use of arsenic as a routine measure seemed to him very absurd, and he would not think of employing this, or any other internal remedy unless the patient's condition seemed to plainly indicate the need of such a remedy.

He had used carbolic acid for many years, both in dispensary and private practice, but never in its pure state. He was accustomed to employ it in the strength of one to four, or one to eight, the latter in children, or in persons having a very delicate skin. In this dilution, it was not painful. There was much uncertainty regarding the prognosis, although the age of the patient, and the duration of the disease were the most important factors.

Dr. S. SHERWELL was surprised that in the course of the discussion no one had alluded to the researches of Dr. A. R. Robinson, whose investigations at the very least equalled those of any other American observer. His theory, that the disease was due to a micrococci temporarily inhabiting the derma below, and in the neighborhood of the site of the lesion, and infecting the lymph channels, would seem to explain many facts connected

with the disease, and to the speaker, it seemed a plausible and a tenable theory; in his monograph on the subject the author gives many plates from microscopical study which if uncontradicted would seem to bear out the case he makes, although he (Sherwell) could not declare himself as yet a convert. Again he referred to his remarks on this same subject at the last meeting of the Association and then as now the speaker was unable to understand this division of alopecia areata into two forms; for it seemed to him, if there were two varieties, the parasitic and neuropathic, there were two diseases. There was no assertion of proof of connection between the two, one of which then should bear the name of *area celsi* or alopecia areata, for the other an appropriate name should be found. He had been greatly interested in reading histories of epidemics of this affection, and especially one reported lately by Dr. Putnam in the *Archives of Pediatrics*, of which Drs. White and Bower had been given as observers. He could only explain them on the supposition that there were two conditions which very closely resembled each other at various points objectively, and yet were not identical as occurs in so many other skin diseases. Admitting this, the term alopecia areata, in his belief, should be confined to that form having a neuropathic history.

Touching the question of internal medication, the speaker said that he usually gave arsenic and other tonics, and that while he had no absolute proofs of their efficacy, which is so difficult, he had no doubt but that they were beneficial not only to the general economy, but in degree to the affected part. He had gone home from the last annual meeting with the intention of making a special study of the therapeutic effects of carbolic acid locally, but unfortunately during the past year, out of a total of about two thousand cases of skin diseases, he had seen an unusually small proportion of cases of alopecia areata, and most of these he had been unable to follow sufficiently long to ascertain the effects of treatment. He was accustomed to employ stimulating local remedies of one kind or another, and changing them. He recalled to mind now one case that had been long under the care of one of his colleagues now present, in which persistent stimulant treatment of another kind had been used, but in which he changed to application of Faradic current when it came under his hands, the result was satisfactory and extremely rapid. Epilation he had not laid much stress on in practice. From the recommendations of others he would be a little more attentive to it in future. He concurred with others who had spoken regarding the more favorable prognosis that could be given in cases possessing both youth and apparent vigor.

DR. G. T. JACKSON said that there were probably several forms of alopecia areata using that term to indicate baldness in circumscribed patches, but our present knowledge justified us, perhaps, in speaking of three forms—the parasitic, the neuropathic and the traumatic. Until the epidemic of this disease occurred in Boston, it was rather peculiar that nearly if not all such epidemics had occurred in France. There was no reason, however, to doubt the correctness of the diagnosis in these instances, and hence, we have strong evidence of the contagious nature of the disease at times.

In regard to the administration of arsenic, since he had been trained by his esteemed friend, Prof. G. H. Fox, an avowed skeptic, of the virtues of arsenic, he was of the opinion that there was no reason for its routine administration.

During the past year, he had endeavored to test the effect of carbolic acid, and had it employed by the assistants on cases in Dr. Fox's service at the Vanderbilt Clinic. An unusually small number of these cases appeared during the past year, and those upon whom the carbolic acid was tried, suffered so much pain that they were not anxious to have the treatment continued. Among the other topical remedies frequently employed, there was, perhaps, none better than the stronger water of ammonia. Influenced by the enthusiastic advocacy of the essence of cinnamon by French observers, he had tried it in alopecia areata, chromophytosis, and ringworm. One would think that chromophytosis would present an excellent opportunity for testing the efficacy of this remedy as a parasiticide, but after persisting in its use both in this condition and in ringworm for a period of several weeks, he had not seen the least improvement. It had always seemed to him that idiosyncrasy played an important part in the development of toxic symptoms in connection with the topical use of carbolic acid. In some cases they developed so quickly that it seemed hardly possible they were due to the absorption of the drug. As to the prognosis, he thought most observers agreed to the very marked influence which the age of the patient exerted upon it.

Alopecia Prematura; Its most Frequent Cause; Seborrhœal Eczema.—DR. GEORGE T. ELLIOT, of New York, read a paper with this title.

DR. H. G. KLOTZ said that scaling of the scalp is a great deal more frequent than is generally supposed, yet not in every case does the hair fall out. He has not found alopecia so constant an occurrence in syphilis. Not infrequently it is slight, and has existed already for a long time, but not noticed by the patient until his attention is directed to it by his fear of the effects of syphilis.

DR. F. J. SHEPHERD said that the frequency of alopecia prematura between the ages of twenty and thirty years could be explained partly by the fact that people at this age are usually more sensitive about it, and hence more apt to consult a medical man. Also by the fact that there are more people at this age. He was of the opinion that heredity exerted some influence, and as confirmatory of this view, called attention to the fact that in some families the different members all became bald in the same way, the baldness appearing first in certain localities, as for instance, in some families the hair got thin about the temples; in others always on the top of the head.

DR. P. A. MORROW was disposed to attribute more influence to heredity than did the author of the paper, and he also believed that climatic conditions, environment, as well as racial peculiarities had much to do with its causation. For example, the Spaniards, Italians, and Poles, as a rule, have luxuriant growth of hair, and it is quite exceptional to find the Sandwich Islanders with alopecia, yet the unfavorable hygienic conditions under which many of them live would seem to be peculiarly favorable for its production. The remark made by Dr. Shepherd about the localities in which the alopecia is prone to appear was very suggestive, as we could not attribute any special tendency to such localization in eczema seborrhœicum; in fact, he had been unable to recognize the existence of the latter condition in many cases of alopecia.

DR. J. C. WHITE said that although it was indeed true that alopecia furfuracea showed itself most frequently between the ages of twenty and

thirty years, the disease causing it usually began much earlier—between puberty and twenty years of age. We should be careful in drawing deductions as to the comparative frequency of this condition in the two sexes, for women are more likely than men to seek medical advice for this trouble. In the vast majority of cases, in its early manifestations, this condition of alopecia prematura has no relation to eczema, and the term *eczema seborrhoicum* is entirely unwarranted. Eczema is an inflammatory affection, and does not betray itself by the gross appearances which we find in so-called "*eczema seborrhoicum*." The disease often leads to irritation and scratching, and this is aggravated by the frequent use of combs and stiff brushes to remove the scales, until finally a secondary and visible inflammatory process may be set up, in other words, an unmistakable eczema. This, however, is a purely secondary manifestation, and forms no part of the clinical picture of the disease called *eczema seborrhoicum*.

DR. H. W. STELWAGON said that his experience had been in several respects opposed to that of the author. According to his own records, heredity exerted a very marked influence, and excluding alopecia areata, he had never seen a bald woman. The localization referred to by a previous speaker, was certainly greatly in favor of the theory of hereditary influence. If the author would examine an equal number of cases among men affected with baldness, and among those who showed no inclination to become bald, he would find the seborrhoic condition just as common in the one as in the other. The speaker said that he had always looked upon the mild scaly condition of the scalp, so called slight dandruff, as a physiological condition rather than a pathological one, and that in many instances it simply meant that the scalp had not been cleansed as often as the other parts of the body. An examination of persons who washed only at long intervals, showed a similar condition on the body—a furfuraceous scaling. He did not think it bore any etiological relation, when slight, to the form of alopecia under discussion.

DR. H. G. PIFFARD did not believe in the existence of the disease called *eczema seborrhoicum*, although it went without saying, that a hyperactivity of the sebaceous glands may be associated with an eczema. While admitting that premature alopecia runs in families very frequently, it must not be forgotten that one of the most common exciting causes is frequent washing of the hair, and fussing with a fine tooth comb. It will be found that this is the previous history of a majority of cases of early alopecia. Personally, he could point to a fairly abundant growth of hair, yet he had not washed his hair or had it shampooed for years. When he desired to cleanse it, he did so with castor oil and alcohol containing in addition some essential oil.

DR. G. H. FOX said that while he could not claim quite so luxuriant a growth of hair on his head, he could say that for many years he had been in the habit of washing his head every day, and considered it an excellent measure for the health of the scalp. The effect of this course could not be judged by the amount of hair in any individual case. The production of alopecia prematura is mainly the result of heredity; it is innate, and, therefore, admits of no cure. The tendency among a large proportion of Americans is to become bald about the age of thirty or forty, and no treatment will modify it in any great degree, although when a diseased condition is present we may do much in the way of improving the health of the scalp and thereby checking the rapid loss of hair. This tendency to baldness is just as

certain to show itself as wrinkles are to appear at an advanced age, and we ought to educate the public up to a proper appreciation of this fact.

DR. G. T. JACKSON said that an examination of one hundred cases of alopecia in private practice, showed that there was a marked history of baldness in the family in 46 per cent. of the cases, and in eleven cases, occurring in women, the heredity was traced to the *maternal* side. In other skin diseases, we know there is a tendency for the disease to be transmitted by one sex alone. Seventy per cent. of his cases suffered from what is commonly known as dandruff, and this, added to heredity was the cause of baldness in many cases. He agreed with the reader of the paper as to the age when it is most frequent. He found that more men consulted him for this trouble than women. In nine out of 100 cases occurring among men, the patients complained of marked sweating of the head in addition to the dandruff. In many cases where there was dandruff, but no hereditary influence, by careful attention to the scalp, baldness could be prevented, or postponed for a long time.

DR. H. W. STELWAGON said that when referring to the infrequency of baldness in women, he had meant *premature* baldness. It was an old notion that the wearing of a stiff hat was a cause of baldness, but he thought it was not so much the character of the hat as the constriction about the head which is produced by wearing any hat very much. It seems reasonable to believe that such a constriction may seriously interfere with the circulation of the scalp, and hence, with its nutrition.

DR. S. SHERWELL said that although he had a very fair alopecia at the age of thirty, up to that time he had almost invariably worn a soft felt hat. It seemed hereditary in his case, all the male side of his family, grandfather, fathers and father's brother, as well as his own, being bald at an early age.

DR. FOX remarked that some had claimed that baldness was more prevalent in America since the introduction of the stiff hats, but there was no evidence confirming this view, while, on the other hand, those who have been accustomed for generations to wear such hats, are no more subject to premature baldness than are other people. The continual wearing of any hat acts prejudicially on the growth of the hair, not by cutting off the circulation, but by pressure on the aponeurosis of the occipito-frontalis muscle.

DR. J. N. HYDE referred to the case of a young lady who had come to him with such a luxuriant growth of hair that advice was sought with regard to having it removed, with the idea of improving her general health. To his surprise, on examining the scalp, he found a condition of dandruff which she said had existed for years.

DR. MORROW concurred in the view that dandruff may be a physiological rather than a pathological condition. He could recall a number of individuals remarkable for their fine hair at an advanced age, and associated with a large quantity of dandruff. In a number of such cases he had found the use of tobacco a well-marked etiological element. He had been frequently consulted by patients who told him that when they indulged in the use of tobacco the hair fell out, but that on occasions when they would temporarily abandon its use, the hair would begin to grow again. This may be looked upon as due to an idiosyncrasy, as tobacco cannot be considered a common etiological factor.

DR. ELLIOT, in closing the discussion, said that he had not seen any cases illustrating heredity, although he did not doubt the existence of this factor in its etiology. The term *eczema seborrhoicum* was undoubtedly a misnomer, but as no better one had been suggested, its use for the present was justified. If patients between the age of twenty and thirty did not have alopecia, they would not consult a physician, and it is not logical to explain the apparent frequency by supposing that it is on account of vanity that such persons seek advice. He could not agree with those who looked upon dandruff as a physiological condition. He had seen this so-called physiological condition last for years, and then all of the hair would suddenly fall out within a few months. This simply meant that the scalp was able to resist the effect of this condition for a long time. It did not indicate that this scaly condition of the scalp was a normal one, and we have no more right to consider it so than we have to consider it normal when it exists on other parts of the body. If a section from a scalp in this "physiological" condition be examined under the microscope, it will be found that a pathological condition is present. He had seen a number of such cases in which the alopecia was not arrested until the dandruff had been removed. The author said that the principal object of his paper was to call attention to the fact that the processes represented by the term "*eczema seborrhoicum*" had nothing to do with the sebaceous glands, and that there was an inflammatory condition of the cutis, associated with hypertrophy of the horny epidermis. From this it is evident that the name *seborrhea* is entirely inappropriate, and should be discarded.

An Unusual Case of Syphilis.—DR. R. B. MORISON, of Baltimore, read a paper with this title.

DR. P. A. MORROW said that we exceptionally meet with cases which are refractory to the curative action of mercury and iodide of potassium, and this is peculiarly unfortunate where the diagnosis is doubtful, as the result of treatment is considered to be the best differential test. He thought with the author that the lesions described were in all probability the result of too heroic treatment at the beginning. He had seen cases which had been so treated, in which the lesions present had been very decidedly aggravated.

DR. H. G. KLOTZ said that for some years he had used with great satisfaction, on the recommendation of the Vienna hospital physicians, Richter's extract of sarsaparilla in cases where the ordinary remedies were not tolerated or were not beneficial. It possesses the additional advantage that being quite palatable, it is acceptable to the stomach and usually increases the appetite.

DR. F. B. GREENOUGH was surprised to think that such heroic treatment had been employed by any physician at the Hot Springs, for cases with serious nervous lesions which he had sent there, had received most judicious treatment. It is perfectly possible for a dose of five grains of iodide of potassium to produce an evil effect when larger doses might not have such an action.

DR. R. B. MORISON, in closing the discussion, said that he had been unable to ascertain the name of the physician at the Springs who had first attended this case, and it certainly did not represent the treatment patients were sent there, usually received.

Notes on the Use of Thilandin.—DR. G. H. FOX, of New York read a paper on this subject.

DR. J. C. WHITE thought we should be grateful to the author for pointing out the uselessness of such a remedy, and consequently saving us from wasting time in experimenting with it. He would like to ask what form of dermatitis venenata persisted after a fortnight.

DR. F. B. GREEKOUGH thought eczema a rather unfortunate lesion on which to experiment with any drug, because in this disease, we find such frequent exemplifications of the truth of the proverb, "what is one man's meat is another man's poison." He heartily approved of the remarks made by the speaker concerning the caution we should employ in recommending any new remedies until they had been sufficiently tested by individual experience.

DR. F. J. SHEPHERD said that we should always be skeptical about new remedies until they had been tested scientifically, and the wards of a hospital were the best place for this. In this connection, it must be remembered that the evidence of some men, as to the action of drugs, is quite unreliable. They see what they wish to see, and often, on the slightest foundation, announce to the world the wonderful efficacy of some new remedy.

DR. G. H. FOX, in closing the discussion, said that the case of dermatitis venenata to which he had alluded, was that of a young woman in which a condition of persistent scaling had been set up, probably by poison ivy. He thought that when we found that published statements in regard to a drug were not strictly accurate we should publicly contradict them. He propose to test thilandin further in seborrhœa and in lupus erythematosus, in which disease it is well known that most other remedies yield poor results.

The Association of Purpura with Acute Œdema.¹—DR. JOHN T. BOWEN, of Boston, read a paper with this title.

DR. J. C. WHITE thought that when purpura complicated any cutaneous manifestations, the tendency was to exaggerate its importance. In any case, erythematous or urticarial in type, we may find more or less hemorrhagic manifestations associated with the cutaneous symptoms. The author's case might be classed as a possible primary manifestation of dermatitis multiformis, or a bullous or hemorrhagic type of urticaria or erythema. The speaker was of the opinion that the more serious forms described by other writers are really not dermatoses at all, and that the cutaneous hemorrhage was only a visible manifestation of a more serious condition. Some years ago he had reported to the Association a case of urticaria associated with marked hemorrhagic manifestations, and in one case, which he had had under observation for fifteen years, the perpetually recurring multiform dermatosis had an almost constant hemorrhagic character.

A Suggestion for Operative Procedure on Erectile Nævi over the Fontanelles.—DR. S. SHERWELL, of Brooklyn, read a paper with this title.

DR. F. J. SHEPHERD said that at the present day the ordinary large nævi of the scalp were dissected out by the general surgeon, a rubber drainage tube being tied tightly around the head, in order to control the hemorrhage. Now that needle-holders were so universally employed, the shape of the needle did not matter so much, round and flat needles being commonly employed.

¹ See page 434 November number of this Journal.

Can Leprosy be Cured?—DR. G. H. FOX, of New York, made a few remarks on the subject.

He said that it is frequently stated that a leper cannot be cured, but he had for a long time endeavored to combat this view, and six years ago had read a paper in which he published a report of a case occurring at the New York Skin and Cancer Hospital, in which the patient was apparently cured. The man had come from the Sandwich Islands, and the case showed originally a well-marked macular form of leprosy. The patient took persistently chaulmoogra oil. The reason for mentioning this case again was that he had just received a letter from a physician in the Sandwich Islands, unknown to him, asking for particulars in regard to this man whom he had had under observation for some time. The letter says that the anesthesia has disappeared, and at present there is nothing left of the leprosy excepting the deformity of the hands, and the physician writes that he does not hesitate to say that, so far as he can see, this patient is a well man.

Regarding the treatment, he would say that he believed the psychical treatment of a case of leprosy was quite as important in most cases as the medicinal. It would not be difficult to kill patients with leprosy, and, in fact, many other diseases, by simply placing them in an asylum with gloomy surroundings and depriving them of all hope of recovery. In the case cited, either a change of climate or the long use of the chaulmoogra oil may be credited with the cure, but he wished to lay special emphasis on the importance of the psychical treatment.

DR. S. SHERWELL, in support of Dr. Fox, also cited a case of great amelioration of symptoms local and general. The patient, a young woman, who was and still is under the care of a physician, and who has been under large doses of nux vomica and chaulmoogra oil, was seen by him four years ago a few times and intermittently since. She had the typical nodular appearance of the hands and face, and also ulcerating leprosy laryngitis, a portion of the epiglottis had already disappeared. Her general condition and appearance had wonderfully improved. Her features were fast returning to their normal appearance. In 1890 the speaker went through the wards of the Hôpital St. Louis with Dr. Vidal, who pointed out several cases of leprosy which he said had improved just as noticeably. He (Dr. Sherwell) thought a change of climate was likely to prove very beneficial.

DR. J. C. WHITE said, that as diseases due to tubercle bacilli occasionally recover spontaneously, there is no reason why in exceptional instances leprosy might not also undergo spontaneous cure. He was surprised to hear it stated, in this Association, that leprosy could be cured by psychical influence, for that implied that such an influence is capable of destroying the life of the tubercle bacillus. An individual case is of no consequence whatever in comparison with the future of a community, and as many in this Association believe that leprosy is a disease which is capable of communication by contagion, the Association should think well before the weight of its influence is given to such statements about so serious an affection.

Multiple Benign Cystic Epithelioma of the Skin.¹—DR. J. A. FORDYCE, of New York, read a paper on this affection and exhibited specimens of the tumors under the microscope.

¹ See page 450.

Dr. G. H. Fox said that the case just reported called to mind a patient whom he had seen about one and a half years ago. He was a coachman whose face was covered with numerous tumors, varying in size from the head of a pin to a split pea, and grouped very closely together about the nose. Some of them were quite firm, while others were softer, and on boring into them with a dental burr, they were found to contain a soft, colloidal substance.

Book Review.

Die Syphilis und die Venereischen Krankheiten. Ein Kurzgefasstes Lehrbuch für studirende und praktische Ärzte. Von Dr. ERNEST FINGER, Docent an der Universität in Wien, 3rd Edition 8vo., Pp. 312, Leipzig and Vienna: Franz Deuticke, 1892.

No matter how well the field for literature of this class may seem to be filled, the fact that Dr. Finger's book has now reached its third edition shows that there is always a demand for really good work; and such work has been put upon the present volume just as it was upon the first edition. Although no discoveries of a very startling nature have been made since the work was put before the public which necessitated the rewriting of any great portion of the pages, it has been found that the whole question of the pathology of syphilis should be considered from a modern etiological standpoint based upon bacteriological investigations, and thus the author has striven to do. The investigations made necessary by, and the experience acquired in the preparation of the work *die Blennorrhoe der Sexualorgane* which appeared in 1888 have been made the most of in that portion of the present volume devoted to this branch. In like manner is reflected in the chapter on hereditary syphilis the author's translation of Fournier's well-known work which we reviewed in the May number of the Journal.

The chapter on treatment has been elaborated, and while not overburdened with formulae and the discussion of new remedies and methods, it gives what the writer considers the best means of combatting the various conditions as they arise. Such an abridged text book written in simple style and reflecting the practical experience of one man is often of greater worth to the student and of more interest to the practitioner than an elaborate and exhaustive treatise. Five colored lithographic plates illustrating the histological appearances of various diseases are inserted.

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